THE NEW GENESEE FARMER
AND GARDENER'S JOURNAL.

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☞ *To all whom it may concern*—There is a large amount of money yet due us from Post Masters and Agents, consisting mostly of small sums, but not too small to be needed these times. We hope all who are indebted to us will remit the amount by mail, or otherwise, free of expense, in as current funds as possible, without further delay. If New York or Eastern bills cannot be obtained, Ohio, Illinois, or Upper Canada may be sent. ☞ Where the amount is not even dollars it can be made so by obtaining an additional subscriber. Do you take?

Complaints of inaccuracies or omissions in the mailing of our paper, are often made to us, but in most cases they are found to have been regularly and properly mailed. We have abundant excuse to offer, however, for any delay in attending to letters or sending papers during a few weeks past. Our clerk, J. E. Force, has taken him a wife and left our employ; one of the publishers, E. F. Marshall, has been confined at home by sickness; and the other publisher, M. B. Bateham, has been most of the time travelling. We have got matters righted again, however, and hope to keep them so. Any subscribers who have not received their papers correctly are requested to mention it to their Post Masters and ask them to notify us.

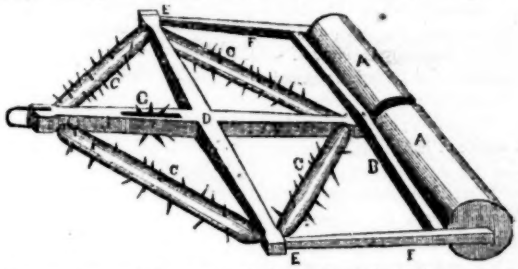
B. & M.

The "Dialogues."—We give our readers a further specimen of the amusing and instructive Dialogues, written by the talented editor of the *Farmers Cabinet*. We learn that they are published in book form, and we wish friend Pedder would tell his publisher to send on a lot to our booksellers; some of our juvenile agriculturists are very anxious to obtain copies.

THE REVOLVING DIAGONAL HARROW.

We give below a description of a Harrow and Roller, which appears to us to be a most efficient and valauble implement of husbandry. On clayey land during dry weather, when the soil breaks up in hard lumps, as is often the case in wheat sowing, such a machine must be of great advantage.

We wish some one of our readers who has seen the operation of this harrow would give us a more particular account of it. The following we copy from the *Farmers' Cabinet*.



REPORT *of the Committee on Arts and Sciences, of the Mechanics' Institute, on the Revolving Diagonal Harrow, by* MOSES G. CASS, *Utica, N. Y.*

C, C, C, C, are revolving cylinders working in the frame D, by means of gudgeons placed in the ends. Each Cylinder is charged with teeth placed perpendicular to the axis, as seen in the drawing. G, is a toothed wheel intended to break up the ground that would otherwise be passed over untouched; being under the lengthwise rail of the harrow. B, E, F, a moveable frame supporting the rollers A, A, which may be attached to or disconnected from the harrow at pleasure.

An examination of this machine, and a little reflection, will serve to show its superiority to the ordinary harrow. In its passage over the ground the teeth enter the earth in all directions, breaking, removing, or tearing up all slight obstructions; while if it meets with a large stone or any obstacle that would throw the common harrow out, the cylinder, which in this machine encounters the obstruction, is enabled by a whole or partial revolution to pass over it.

An experienced farmer, who has for some time had one of Mr. CASS's harrows in use, remarks that "by attaching the seed sowers and rollers a most perfect finishing operation will be performed, and at a saving of one-half if not three-fourths of the labor commonly required to do the same work."

WILLIAM A. COX, *Chairman.*

Mechanics Institute, February, 18th, 1840.

The Agricultural Fair at Rochester.

By a notice in another column, it will be seen that the Annual Fair of the Genesee Agricultural Society, is to be held at the same time as the great Fair of the Mechanic's Association. This we think is a good arrangement. The many thousands who witnessed the Mechanic's Exhibition last season, will need no persuasion to induce them to attend again: and the increased and combined attractions which will this year be presented, cannot fail to draw a larger concourse of spectators than ever before assembled on any similar occasion in Western New York.

We hope the farmers of "Old Genesee" will do themselves credit; especially the farmers of Monroe county, on whom the interests of the Fair must mainly depend. They *can*, if they *will*, get up an Exhibition which it would puzzle any other section of the Union to equal. What say you, readers, will *you* try?

Legislative aid to Agriculture.

MESSRS. EDITORS.—I wish some one of your correspondents, who possesses the requisite information, would inform us what has been proposed or done by the Legislature of this State during the two last sessions, for the advancement of agriculture. I should like to know whether we farmers, who constitute the greater part of the community, produce the greater part of the wealth, and pay most of the taxes of this State, are always to be overlooked, and our interests disregarded by our very "*humble servants*" at Albany, whom we pay fat salaries out of our hard earnings.—Does not the embarrassed condition of our country absolutely demand that something should be done by government to foster and improve the agriculture of this State? Will not the New Genesee Farmer speak out on this subject? Who will suggest the mode by which the State can best promote the cause of agriculture, without large appropriations?

Rochester. MONROE.

The Weather, the Crops, and the Harvest.

During the early part of the past month, the spring crops in this section, especially the corn and potatoes, suffered materially from drouth; but the seasonable rains since have apparently quite recovered them, and every thing now looks promising.

The wheat crop is mostly secured, and accounts from all quarters agree that it is more abundant in quantity and better in quality, than it has been for many years past. New wheat begins to appear in our market, and finer samples we have never seen. We have had frequent showers here of late, but have not learned that they have done any injury to the wheat.

☞ Canadian Agents. ☜

We find it necessary to repeat the notice that D. SMART, Esq., Post Master at Port Hope, is general Agent for us, and we wish other Post Masters who remit to us by mail would do so through him, and thereby save us the American postage.

Mr. J. W. Brent, of Toronto; and Mr. Chas. Heath and Mr. John Creighton of Kingston are local agents; to whom payments or communications for us may be made.

☞ All Post Masters are requested to act as local agents.

To Correspondents.—Several valuable communications received rather late are unavoidably crowded out in order to make room for the affairs of the agricultural society. They will not spoil by keeping a month.

Cherries.

We lately took a journey of two hundred and fifty miles through the Western part of this State, in a private carriage, having good opportunities for observation,—and only in one place after leaving home, have we seen good cherries. There we found two or three sorts that were pleasant, but hardly *fine*. *

We make these remarks to show how little the most of our farmers know about good fruit. At many home-steads we saw either no cherries at all, or the common sour pie-cherry, with some seedlings of the small heart cherry in a few places; but only one grafted branch. So little indeed is seen of the better sorts, that a very intelligent friend of ours in the West, had arrived at the conclusion that this climate was unfavorable to their growth and maturity! Now if we have spied out the *nakedness* of the land, it may be right and proper to tell our negligent countrymen, how they may *clothe* their premises, and eat fine cherries, *as we do*, for six weeks at least in constant succession.

We have always found, in making collections of any kind, that a proper *place of deposit* was of great importance. Enclose therefore a fruit garden, in any manner that may seem best, and of any size from half an acre to two acres or more.—Not all for cherries?—No; but whoever has a taste for fine fruit, will want peaches and plums, and pears and apricots; and not one tree only, because the sort may be "good enough," but kinds sufficient to follow one another in succession during the longest season of that particular fruit.—We have no notion of feasting one week and fasting the next.—Our trees were originally planted twenty feet apart, and at this distance there will be room enough for a long time to come.

We have at this time about twenty kinds of cherry trees in all; and ought to have had many more, but other trees were sent from the nurseries, instead of the kinds we paid for. For instance, the American Heart, the Amber Heart, the Oxheart, the White Bigareau, and the Downton, came not; but in their stead several sorts which we had already in possession. This treatment was highly improper and abusive, but mistakes may sometimes creep in, even where great care is taken, and fair dealing intended.

The earliest, cultivated either in this country or Europe, is the *May Cherry*, which is small in both fruit and branch. We presume it might be grafted on the dwarf Siberian, and then it would stand as a mate for the currant bush. We have had them ripe in the latter part of the fifth month.

The *Early Richmond* begins to ripen in immediate succession. It fills the space between the May Cherry and the common Pie Cherry, both in regard to size and the time of maturing its fruit, which though sour at first, becomes very pleasant when fully ripe. It is valuable, and may hang on the tree for several weeks.

Four other cherries in our fruit garden ripen at the same time with the Early Richmond. The first sort is also a round cherry, of good size, sweet for one of its class, and decidedly a favorite. It came under a wrong name; and we do not find it agree with any description in Lindley or Prince. It will scarcely be the less prized, however, on this account.

The next is *Knight's Early Black*, which came from one of the Flushing nurseries marked "Black Tartarian." We hardly regret the mistake. Indeed the editor of the Pomological Magazine says that if he were called upon to state specifically the difference between them, he would be unable to do so. He adds however, "It has the rare merit of ripening earlier: on a south aspect it will be ripe even earlier than the May Duke." † It is so with ours where the trees stand together. We have had some of these cherries from young thrifty trees that measured an inch or more in diameter.

The *White Tartarian*, like the last, is a heart cherry; and when fully ripe there is none better. We have a young tree marked the White Hartfordshire, which differs in its growth but not in its fruit; and when a few of each sort were exhibited, we were unable to detect the difference.

The *Black Caroon* is also a heart cherry, of good size, and a fine fruit. It receives a full share of attention from visitors. At Aurora and its neighborhood, it has been called the Albany Cherry; but it would be well to lay this name aside.

While these sorts are growing thin on the branches, the *Transparent Guigne*, is swelling and softening as well as the later crop of the May Duke; and both are highly valued. One of the round class, marked "*Waterloo*," keeps time with them, and the fruit is decidely fine; but we cannot distinguish in it Lindley's characteristics of Knight's Waterloo with certainty, and we must wait for more light.

The *Carnation* is later than the preceding sorts.—It is a moderate bearer, and in rainy weather is apt to decay on the tree; but it is very palatable, those *who have never seen it ripe* to the contrary notwithstanding. It appears to do better where it receives the reflected heat from a building. The brief but timely showers of the present season have not injured it; and in a drier climate, this tendency to decay would be no objection.

The *Common Pie Cherry*, (Kentish?) and the *Morello*, are valuable fruits, and ought to be more cultivated than they are; but they are too sour for the table, uncooked. These sorts grow freely from suckers, and are generally within the reach of every one who wishes to have them.

The *Cream Cherry* originated in or near the South part of Seneca county, and promises to be valuable. It takes the name from its color; which however, is sometimes tinged with red. It is the latest of *our* cherries, medial size, heart shaped, and sweet. We want to see it on a stock exclusively its own, and then we can form a better judgement of its merits.

One remark more. Ten trees of the finest sorts of cherries can be had for five dollars. The interest on this sum is thirty-five cents a year. Who would not be willing to pay it annually for such a treat?—for cherries come annually without fail. †

* In the principal villages doubtless, some excellent sorts are cultivated. We speak of only what we saw.

† We think however, that pomologists err in referring to the May Duke's time of ripening: It ripens in patches, and some may be used when the cherries on the other parts of the tree are not colored, showing a difference of several weeks.

The Canada Thistle.

This weed has so much increased in some parts of Cayuga county, that it may be found in almost every lot and field. Among crops where the hoe is introduced, as corn and potatoes, it stands but little chance; but among such as are sown broad-cast, it is a great pest; and every advantage that can be taken of it, ought to be known. We wish to contribute our mite. Oats when sown early in the spring, will not send up stalks as soon as this weed: and there is *a time* when the latter may be mown without injuring the crop.—The scythe, if not very sharp, will glance over the grain, but cut the stiffer stems of the thistles. This operation gives them an effectual check for that season, and the oats may be harvested with very little inconvenience.

We would recommend this practice however, only where there are but few patches of thistles in the field; and not where it is much over-run with them. In the latter case, the land should not be sown with wheat, oats, or barley; but either planted with some horse-hoeing crop, or turned into a regular fallow,—not to be ploughed only two or three times, but as often as once a month throughout the season, and then in the most thorough manner, so as to leave no shoot uncut. The farmer who undertakes this business, must prepare himself accordingly. He must make his calculations before-hand, and nerve himself for the contest. No half-way measures will answer. To plough them once *in the spring*, cultivates them; and to plough them twice, is but a check; but every subsequent encounter destroys a portion of their vital energy.—The next season cultivate the ground well in corn, potatoes, field beets, or swedish turnips, and it will give them the finishing stroke.

To pull up the stalks of this thistle, weakens the horizontal root much more than to hoe them; and we have used wooden tongs for this purpose, nearly shaped like the blacksmith's. If the holes left by the stalks, be then filled with brine, very few if any new shoots will appear. †

From the Southern Cabinet.

Notes on European Agriculture.

BY AN AMERICAN.

WHEAT.—In my last I gave some notes on the rotation of crops in Great Britain,—a judicious mode of culture, which is now adapted to a considerable extent in Sweden, Denmark, and the grain growing countries in the north of Europe. Thus, the soil, although it does not annually give the same kind of product to the cultivator, is never idle, but produces in succession crops which are often more valuable than wheat itself.

As however wheat is not only one of the staple articles of Europe, but also of our own country, I propose to devote this article to a description of the method of culture.

1st. PREPARATION OF THE SOIL. The wheat crop, as I have stated in a former chapter, usually succeeds the fallow crop, which consisted of potatoes, beans, or turnips. This fallow crop is richly manured. Stable manure is in a majority of instances used, and in most soils is preferred. It is spread on the fields broad cast in the proportion of twenty or twenty-five tons to the acre. In about half the cases it is scattered over the fields in the early part of winter, and ploughed under in December. Where time is wanting the manure is not applied till early in the spring, which I am informed, answers equally well. Lime is much used on light sandy soils. In some parts of the coast of Holland, where the soil is poor and sandy, the application of lime has given a dark, rich color to the earth, which now retains its moisture and produces abundant crops. On the sandy lands between Berlin and Dresden resembling our Carolina pine-barrens, I noticed it used in some fields with very beneficial effects. Similar results have been produced in New Jersey by the application of lime on bare sandy soil. Bone dust is much used in England on light soils. It is generally procured from the continent. A few mills for the purpose of grinding the bone for manure exist in England and Scotland, although they did not fall under my notice. A model of one exists in the agricultural museum of Edinburgh, which was politely exhibited to me by Professor Lowe. The construction is very simple; but as I believe it is well understood in the United States, and as I am not much of a mechanic, I need not venture on a description. The bone dust is used in the proportion to twenty-five bushels to the acre; a greater quantity has not been attended with any increased beneficial results. It is sown broad cast on the land; sometimes mixed with turnip seed. Night soils, (a very valuable manure,) are limited to the neighborhoods of towns, and principally applied to gardens.—This article is prepared in the vicinity of Paris by a method rendering it not in the least offensive. It has the appearance of large dried bricks, which are broken up when wanted, and applied to the land in the manner of bone dust.

When the fallow crop has been removed, the ground is ploughed and put in order for the reception of wheat; occasionally some manure is added, but it is in general believed that the ground is sufficiently enriched for the ensuing crop. The ploughing is similar to that of our own country. The wheat is sown from the middle to the end of October, generally in drills, but sometimes broad cast. The sowing or drilling of the wheat does not complete the labor till the time of harvest, as is the case in America. The wheat is regularly hoed between the drills two or three times, and when the

wheat is about a foot in height, it is carefully weeded, hence, we seldom find in English wheat either cockle, cheat, or the seeds of the various weeds with which our fields are so often infested. The wheat is usually gathered with the sickle. I saw no cradles, like those of America, in use

2nd. Quantity of Seed to the Acre. In this particular I found a great difference of opinion between the British and American farmer. In this country a bushel of wheat is considered sufficient for an acre; formerly many persons only used three pecks per acre. I am inclined to think, that we have erred in using too little seed. I remember visiting the fields of a farmer in New York many years ago, and observed that whilst the heads of wheat were very fine, the stalks appeared to stand thinly on the ground. He had sown three pecks to the acre, and the produce was nine bushels. I suggested to him the propriety of using a double quantity of seed. Three years afterwards he sowed the same field again, using a bushel and a half to the acre,—the season and tillage were similar to that of the former sowing. He subsequently informed me that his land this year produced fifteen bushels to the acre, and that he was now an advocate for thick sowing.

I extract from my notes on English husbandry the following quotation, which I either wrote down from the dictation of some responsible agriculturist, or copied from some agricultural journal of England: I am inclined to think the latter. I have reason to believe it is the usual mode adopted in England and Scotland.

"On rich lands in good condition, when the soil is strong loam or clay, and well drained, two and a half to two and three-quarter bushels per imperial acre may be sufficient, of the ordinary varieties. As spring sown wheat does not tiller well, one half to three-quarters of a bushel more may be necessary; but strong clays are not well adapted to spring sown wheat, although it is quite possible that a suitable variety may be obtained for that purpose.

"On medium soils one half bushel more may be requisite for such season of sowing, regulating the quantity to the quality and condition of the soil, and the preceding crops. When potatoes have been raised in the fallow division, at least two or three pecks more may be necessary than after a clean fallow.

"On high and light lands, wheat after fallow should be drilled in from two to three inches deep, to prevent throwing out in spring. With this precaution, if the land is in good condition, little more seed will be wanted than on medium; but on such lands wheat holds best after grass, and in that case requires two or three pecks more seed than under any other circumstance."

As I have never seen the stalks of wheat so thickly crowded together in my own country as in Great Britain, and as their average crop is decidedly greater than ours, I have accounted for the difference, at least in some measure to the greater quantity of seed used by the European agriculturists, after making due allowances for the differences of climate and modes of culture. I remarked that in England, in consequence of this thick sowing, there was but one stalk to each grain, whilst in America, where the seeds were farther separated, there are usually side stalks, few of which produce equally well with the one proceeding from the grain. The additional quantity of the seed sown is doubly compensated for, by the greater product to the acre. These, however, should be matters of experiment with us, in a climate where our summers are much warmer, as I am fully aware lands may be too thickly as well as too thinly sown.

3d. Varieties of Wheat in Europe.—Botanists have been much perplexed in endeavoring to decide on the true origin of our varieties of wheat. It is now difficult to ascertain what is the true *triticum sativum* or common wheat, and the latter *triticum æstivum* or summer wheat. I am, however, inclined to think, that all the varieties may be included under one species, as there are no distinctive marks by which they can be separated. Under *triticum hybernum*, for instance, are included some of the earliest and best varieties of spring wheat, and under *triticum æstivum* are included several bearded wheats, equally hardy, and requiring as long time to arrive at maturity as our common winter sorts. Indeed, the French Botanists have now referred all the varieties to *triticum sativum*. But this is not the place to settle nice botanical distinctions.

Spring wheat is seldom cultivated in England as a general crop. In every instance where I saw it growing, it appeared to me rather inferior.

In my last number I alluded to some of the varieties of wheat at present cultivated in England. The golden drop, blood red, Uxbridge, Hunters, Mengoswells, Whittington and Hicklings. The three latter, like our okra cotton and rohan potatoe, have been so recently introduced that they have not yet found their way into general cultivation. The specimens which I saw, however, were very superior, sufficiently so to encourage the American farmer to import the seed, which may be ordered from Lawson and Sons, Edinburg, or Loddige in London, or through any merchant in Liverpool. An order sent in July will be in sufficient time to enable the farmer to plant the seed in autumn.

The wheat called Leghorn, or Tuscany wheat, was introduced into England for the purpose of procuring straw for the manufacture of bonnets, &c.; but it was found not to succeed as well as the common rye, which is now exclusively cultivated in the Orkney islands and the North of Scotland for that purpose.

In the Northern parts of France, I saw cultivated pretty extensively, very hardy variety of wheat called *Poulard bleu*, and *ble, blue conique*. It is partial to rich clay soils; its grains are dark and very hard.—An Egyptian wheat called *Ble de Smyrna*, was also highly spoken of. There is a variety of wheat brought originally from Morrocco that is successfully cultivated in Italy, but does not succeed well in the northern parts of Europe, that might be experimented on in our southern States. Its spikes are long, loose, nodding to a side, and awned; grains about half an inch in length—reddish, transparent, and very hard. It usually goes under the name of Polish wheat, although it is not much cultivated in Poland,—is said to have come originally from Morocco, and is often called Mogadore wheat.

I find in my journal, descriptions of nearly one hundred varieties of wheat in Europe, but doubt whether the transferring them to your pages would be of any material benefit to the American farmer, who, I fear, would scarcely import them even as an experiment. Should the seeds which I brought with me and distributed through several parts of our southern country, be successfully cultivated, I will endeavor to notice them on some future occasion.

It would be of great advantage were our agricultural societies to imitate the examples of those of Europe, in attaching a museum to their institutions, where not only the different grains cultivated might be exhibited, but also the stalks and plants preserved in a dried state,—the mode of culture and product carefully noted for the benefit of agriculturists. I observed at Washington, during the last summer, a successful attempt of this kind by the intelligent superintendant of the patent office.

The English farmer has more to apprehend from the constant drizzling rains during harvest time, than from insects, which are the bane of the American farmer. The so called Hessian fly, has never been introduced, and the poor Hessian has sins enough to answer for on another score, without meriting the charge of conveying this pest to America in his straw. The insect is not known in Hessia, and although two specimens were shown to me as having been procured in Sweden, they proved to be of a different and harmless species. I fear we will have to claim it along with the oppossum and rattle-snake, as exclusively American. The wheat of our country also suffers materially from other insects, which prey upon it in its ripened state; hence, in many parts it is necessary that the crops be not only thrashed out, but immediately carried to the flour-mill. In England, on the contrary, I perceived stacks of wheat that had remained unthrashed for three and four years, and in many instances five or six, without any other molestation than that of the Norway rat—that cosmopolite, gregarious, omnivorous pest of all countries.

There are two of the sciences, however, widely removed from each other, and however seldom thought of by the American farmer, that have long appeared to me as inviting greater attention in an agricultural point of view than has hitherto been devoted to it. I mean chemistry and entomology. The former enabling us to analyze our soils, and directing us to the best modes for their improvement, and the latter pointing out to us the habits and character of those insects that prey upon our fruits and grains, without which we cannot find a remedy against their depredations.

Growth of Potatoes.

A correspondent of the Inverness Courier mentions a mode of growing potatoes, which may be useful in the saving of seed in seasons of scarcity, and also of furnishing a supply a month earlier than the usual period. The experiment described consisted in planting the shoots thrown out from potatoes kept in the cellar, on the 26th of May, about a month later than the usual period of sowing. They were planted in a garden and raised on the 19th of September, and the result was highly satisfactory. At one stalk there were nine potatoes the size of eggs; at another two large ones, one of them weighing 1 lb. 2 oz. The cultivator is of opinion, that had the shoots been planted a month earlier, there would have been an excellent and early crop. The shoots should be about ten or twelve inches in length, and dibbled into prepared ground, and all covered except the two small leaves at the top.—None of the potatoe should be planted along with the shoot; but they are the better to have a good many fibres thrown out from the root end of the shoot.—*English paper.*

From Childs' Work on Beet and Beet Sugar.

Culture of the Beet.

Species and varieties of the beet.

The following are the principal ones cultivated in France.

1. *Mangel Wurtzel* or *Scarcity Root.* It has large, thick, succulent leaves; the root is white within and without; grows much out of the ground, and attains a size superior to all other species. Many cultivators have remarked that though it is good for fattening cattle, it is not equally favorable to the production of milk.

The variety cultivated in England has a reddish or whitish red root. It is not much valued for domestic use, although the leaves are good to boil as spinach, and the leaf-stalks and midrib to stew and eat as asparagus. *Dr. Lettsom* states that on his land, which was propitious to its growth, it weighed, on an average, full ten pounds, and the leaves half as much, so that the whole produce was fifteen pounds of nutritious aliment to every square of eighteen inches.

2. *Red* or *Blood Beet.* It has a long red, eatable root, and darkish red or purple leaves. Sown at suitable distances, much greater of course than are ordinarily allowed it in our gardens, it becomes nearly as productive as the sugar beet. The larger the roots grow, the tenderer they are, and the deeper their color, the more they are esteemed.

The varieties of these species are the common red beet, the early turnip-rooted beet, the green-leaved red beet, and the yellow-rooted red beet.

3. *Yellow Beet.* It has yellow, or greenish yellow leaves and yellow roots, which are frequently very long and large. It has been cultivated for making sugar, but most manufacturers have discarded it, finding that its juice, though next in richness to that of the sugar beet, contained from one-eighth to one-quarter less saccharine matter, than the latter. It is prone to degenerate. A field sown with genuine seed will sometimes yield a fifth, sixth, or greater part, with a coat of a rose color and flesh white, or coat yellow and flesh white. A single seed will occasionally produce three yellow beets, and one rose colored; though what is commonly called one seed, does in fact contain from one to five seeds.

4. *White Silesian* or *Sugar Beet.* It has pale green leaves, the root pear-shaped, and shorter than the other species. It grows entirely within the ground, except it meet with some obstruction, in which case the exposed part becomes green and loses a portion of its sugar.

There is one variety of this species, the red-veinleaved, with rose-colored rings in the flesh. This is considered a degeneracy.

In Germany, besides the yellow and sugar beets, they cultivate principally the following, which appear to be varieties of the mangel wurtzel, or as it is sometimes called, the *great German beet.*

1. *Red* and *White.* It is usually red and white within and without. This beet grows seventeen or eighteen inches long, of which one foot is above ground; and it sometimes weighs twenty-five pounds. Its juice is very watery, and in proportion to its size it contains the least nutritive substance.

2. *Yellow* and *White.* It grows half out of the ground. It is rather small and less woody and aqueous, keeps better and is more nutritive than the preceding. It sometimes weighs twenty pounds.

3. *Pale red.* It penetrates the earth more than the others, and weighs as much as sixteen pounds.

There is no limit to the varieties of the beet. They may increase like the crosses of sheep. This will always be the case; if different sorts for seed are not set at a good distance apart. Soil and climate have sometimes the same effect. Some fields will produce only the red-vein leaved, although none but the seed of the pure white Silesian was sown.

It is supposed by some that the wild sea beet, so called, is the parent of all our cultivated beets It is a native of Holland and Great Britain, on the sea coast and salt marshes. It is found about Nottingham, in England. The first beet planted in France,

was, however, a native of the southern and maritime regions of Europe, and was brought from Italy. The Romans were acquainted with the white beet, which they called *cicla*, *sicula* or Sicilian.

UPPER CANADA.

Having completed our rambles in Upper Canada, we might offer some detailed remarks on the agriculture of that province; but we are happy to say the task has fallen into abler hands than ours. It is highly gratifying to find occasionally such men as the HON. ADAM FERGUSON, who at times can stand in the halls of Parliament and grapple with giant intellects in discussing the affairs of government, and then return to the quiet farm and find scope for their powerful minds, in elucidating the science and practice of agriculture.

It was about noon, one warm day in July, while journeying from Toronto to Hamilton, on horseback, that we turned aside from the main road, to find the residence of Mr. Ferguson. We found the house, beautifully situated on the side of a hill, overlooking the broad Lake Ontario in one direction, and in another the Bay of Burlington, with the pleasant village of Hamilton backed by green hills in the distance. Near the house is a fine expanse of fields and meadows, in which we found some of the best and most perfect animals of farm stock we have ever seen. Mr. F. is an experienced amateur of fine cattle, and has imported quite a number of splendid animals, one of which ("SIR WALTER,") is now owned by Mr. McKnight, of this city. He has another, similar to it, which he now offers for sale.

We shall not soon forget the pleasant afternoon which we spent at Mr. Ferguson's, and the hospitality of his accomplished lady will long be fresh in our recollections.

Agriculture of Upper Canada.

(BY THE HON. ADAM FERGUSON.)

WOODHILL, Upper Canada, July 20th, 1840.

MR. BATEHAM:

SIR—When I had the pleasure of a visit from you, (shorter, certainly, than I could have desired,) you expressed a wish that I should give you some of my *notions* on Canadian farming.

Conscious of my inability to do justice to the subject, I am yet willing to make the attempt, principally, if not solely, actuated by a desire to see American and Canadian farmers unite in promoting the most important temporal concern in which *man* can be engaged, viz: the cultivation of the soil, and improvement of our breeds, and management of domesticated animals. I have all my life been zealously attached to rural pursuits, and with all its vexations I believe no line of life is better calculated to ensure happiness, health and independence, than that of the husbandman,

"O fortunati Agricola sera si bona norint."

Canadian farming, to be fairly estimated, must be considered the rude efforts of manufacturing labor, expended upon a mass of raw material, valuable in itself, but requiring both capital and time to perfect.

The Upper Province, or I may say, the upper portion of the province of Canada, to which these crude remarks are chiefly intended to apply, is a country eminently designed by Nature for Agricultural enterprize. The soil and climate, the vast means of internal navigation, the choice of markets, all clearly indicate her as the Farmer's Home. Her sons, *native* or *adopted*, must not indeed indulge in sloth, or in golden dreams of wealth, rapidly amassed, but they may count upon a fair return, for diligence and labor, with the satisfaction of spending rational and happy lives, possessed of every rational comfort and true enjoyment.

To form, as I have said, a fair estimate of the skill and proficiency of our farmers, due allowance must be made for the complicated difficulties which the early settlers were compelled to encounter, and which they have in so large a measure effectually overcome. It would be most preposterous to look for nice attention to the minute details of farm management, from men struggling for a bare subsistence, and who could command no other aid save the inmates of their *shanty* or log hut. In this our day, it is scarce possible to conceive the harassing privations and obstacles which they have to encounter, in the want of roads, distance of mills, and merchants, with many a sad *et cetera*, now hardly felt in the most remote sections of the Province.

Years have rolled away, great changes in the frame of society have occurred in Europe, and hosts of well educated individuals, possessed of capital and skill, have chosen Canada as a home. A new era has arrived, and vast improvements may reasonably be anticipated, should *Old Settlers* and *New Comers*, cordially and honestly concur in giving and taking counsel together. If the one party is possessed of superior knowledge or skill, the other enjoys the no less valuable fruits of experience, with a useful training in the school of *make shift*. Each may do a world of good to himself and to his neighbor, by evincing a sincere willingness to learn, a frank desire to communicate, and a firm resolution to shake off the trammels of prejudice, whether *native* or *imported*.

A fair test of rural improvements has been correctly deduced, from the attention paid to facilitate intercourse, by good roads. In tracing the progress of Scotland to that distinguished station which she is acknowledged to occupy in the history of Agriculture, we find that the value of good roads began to be appreciated just as a better system of cultivation commenced. Whether this may be strictly attributed to *cause* or *effect*, matters little. The fact remains incontrovertible, that good farming and an amendment of roads have invariably gone hand in hand. Sixty years ago wheel carriages were nearly unknown in some of the richest districts of Scotland, and grain was conveyed to mill and market on horses backs, through roads well entitled to vie with the worst mud-holes of Canada. Tried by this test, the agriculture of our Province may well be stated as in its infancy, but we have already a glimpse of better days, and ere long, it is more than probable, that a decided change will take place in our system of road making. In the early days of a new country, personal service upon the roads is the most convenient, and in fact, the only system that can be pursued; and while the population continues sparse, and every man works near his own farm, it will suffice and will go on smoothly enough. In time, however, a more extended scale is required, as business and general intercourse increases. Farmers begin to grumble as their road duty is raised, unwilling to calculate, or to admit, that the increased scale of road making is to benefit them. In this way, road service is too often performed with a grudge, and in a slovenly manner, and we have even heard of an instance, where on a hot day the party actually sent for a *barrel of beer* and a *fiddler* to animate their spirits, with what advantage to the road may be easily imagined.

Under these circumstances, it is earnestly to be hoped, that a pecuniary commutation for labor will be made *compulsory* in place of being merely *optional*, as at present. There can be no question that both the roads and the public will profit by the change.

If the law warranted the exaction of money for road service, upon a reasonable scale of conversion, and if it became a real burden upon the land, then might townships, or individuals, interested in the formation or repair of any line of road, be in safety, by receiving an adequate assignment of the road fund, to advance, or to borrow the money required, *at once*, and thus complete in *one season, and in a far superior style*, a useful public work, which must at present drag heavily on through many years, each revolving one finding enough to do, in repairing the damage of the preceding season, the main work continuing almost at a stand. But it is more than time to leave the roads and attend to the fields, and even there I find that it will be well to restrict my remarks to some of those points where improvement is most palpably required. It would occupy a volume to discuss *rotations of crops, drainings, farm buildings, and implements, varieties of seeds, grasses, &c. &c.* and in confining myself to *live stock*, I am satisfied that I pitch upon a branch of rural economy, where all who know Canada, and understand the subject, must admit that ample room for improvement is to be found.

Live Stock.

If required to report upon the cattle of Upper Canada, and to assign them a place with any recognized variety of the ox, the most experienced breeder would find himself wofully at fault. Affinity, may, no doubt, be often traced to North Devons, Herefords, or Sussex, and to the Alderney or Norman breeds, but nothing definite will be met with, and it is therefore an object of paramount importance to procure a more permanent variety of stock, likely to maintain its *identity*, and suited to the wants of the Province. It is not to be supposed, in making this attempt, that Canadian farmers will at once admit the superiority of any new breed. Time must be allowed for dispelling prejudice, and converts obtained by *unobtrusive* but *decisive* examples.

We shall assume that no impartial and competent judge will hesitate to admit the decided superiority of these breeds, which have for many years been the anxious subject of improvement in Britain.

Of cattle used in draught, the two most in repute are *Herefords and Devons*, the former large and heavy, the latter of smaller size, and more agile form.—For farm labor, or forest work, no fitter breeds could be found, but it may be reasonably doubted whether the stock amongst us may not provide the farmer with sufficiently useful animals for such purposes, without incurring the expense and hazard of importing bulls from Hereford or Devon. Such, however, is not the case in relation to the Dairy, or *the raising the greatest possible weight of superior beef within the shortest possible period, and at the least cost, for food.*

Early maturity, and a tendency to lay flesh and fat upon the *valuable points*, (a quality perfectly understood and duly appreciated by intelligent butchers,) are distinguishing characteristics of well bred and symmetrical animals, and in no existing breed have these been so steadily maintained, or so distinctly developed, as in the *Improved Short-horn* or *Durham Breed*, and the introduction of *thorough bred* Bulls of this description will decidedly prove the simplest and most effectual mode of improving our stock for every purpose. As Improved Short-horns are yet strangers in our land, a slight sketch of their history and claims may not be altogether out of place.

The counties of York and Durham were the original sources of this valuable breed, and the banks of the Tees furnished the stock upon which improvement was grafted. Much has been written and spoken, and great has been the speculation and altercation upon their early history and progress. A degree of mystery continues, and will probably even obscure the steps of their advancement. Great secrecy was maintained by the Messrs. Colling and other early breeders, and little more is known than the exercise of exquisite skill, patience and attention in selecting animals of promise, one excelling in one point, and another in

another, with a tolerably shrewd guess, that hardy and thrifty Galloway and Kyloss had occasionally been made to contribute their mite. Be the course pursued, however, what it may, it was chosen with judgment, followed out with the greatest steadiness of purpose, and has been crowned with complete success. There is at this day, no breed of domesticated cattle in the world, which can compete for a quick return with improved Short-horn, always premising that there exists a market for good beef, and that the stock receives ordinary care and attention.

It is a regular occurrence in the markets of Darlington and Morpeth, to find thorough fat steers sold at twenty-seven to thirty months old, which weigh *seven or eight cwt. sinking offal*, and with which no means have been used beyond the common run of the farm. It is a great mistake which many adopt, when they denominate these cattle a delicate race. They require in ordinary management, no extraordinary pampering in care, although disappointment both in size and form must inevitably ensue, if abandoned and neglected, as we see too many unhappy animals around us.—It is likewise a common, though equally unfounded assertion that Improved Short-horns are defective as milkers. Many decisive instances of deep milkers might be adduced, but it ie quite sufficient to state, that the great dairies of London, frequently containing 800 or 1000 cows each, are supplied by the Yorshire and Durham breeders. No doubt, among *very high bred* Short-horns, cows are occasionally met with, whose milk scarce suffices to rear their calves, and whose tendency to obesity is such that it is extremely difficult to procure from them a calf at all. But it is equally true, that in numerous instances, cows of this breed yield extremely well to the pail. The great secret consists in keeping steadily in view the tendency of *Improved Short horns to early maturity* and the important quality of repaying well for food consumed, *either in beef or dairy produce.* The judicious breeder will take his line. If milk be his object, he will have an eye upon those cows who yield well, and *continues long in milk*, for be it remembered, that it is not the cow with the greatest flush of milk, for a few weeks after calving, which will pay the farmer best, but the animal who continues to yield a fair supply *during the longest period of gestation.* Should the quick production of beef be the *desideratum*, attention will be paid to those animals who exhibit a tendency to lay what they consume upon their ribs. It has been doubted by very intelligent men, whether *decided* milking qualities, can be with certainty transmitted in any breed. Whether this opinion be correct or not, there is no manner of doubt, that *well bred* Short-horns are blessed with an *inherent* quality, which will repay the breeder in no ordinary measure for food consumed, just as he may incline, to direct his attention to the dairy or to the shambles.

The Ayrshire cattle have in Scotland, acquired a high and deserved celebrity as Dairy Stock. It must be kept in remembrance, however, that the climate and soil of Ayrshire, rendered the dairy a prominent feature in the husbandry of that county. Without any disparagement of Ayrshire stock, I must be permitted to give the preference to *Improved Short-horns*, for Canada. In fact, I verily believe them to spring from a common origin, and although it may be impossible to ascertain the period of migration, there are strong grounds for connecting them with the primitive stock, upon the banks of the Tees. In confirmation of this theory, it may be stated, that *pure* Ayrshire cattle were in high favor with the Duke of Montrose, and received from him more than ordinary attention and favor.—The gradual effect of this care was a distinct approximation to the original breed of large-boned, coarse Short-horns. At a great Cattle Show of the Highland and Agricultural Society of Scotland, held a few years ago in Glasgow, an Ox (5 years old I think,) was exhibited by His Grace, which weighed when slaughtered, 1552 imperial pounds, with 180 lbs. of tallow, *sinking offal*, a heavy, but coarse brute.

The Dairy is a delightful and profitable branch of husbandry, making good returns, and *particularly useful in Canada*, as demonstrating to every judicious farmer, the urgency of securing the aid of a fit helpmate, without whose activity and superintendence all will go wrong. In dairy management, success will invariably, and *only* attend cleanliness, *scrupulous and minute* in all the details. Dairy management in Scotland has been much encouraged by the Highland and Agricultural Society. The county of Aberdeen was distinguished for the large quantity and *inferior* quality of the butter produced. By a change of system and superior attention to cleanliness, the butter of Aberdeenshire quickly rose in the scale, to an equality with the best Irish, and it may perhaps be acceptable to state the mode recommended, and successfully adopted by dairy farmers of that extensive county.

We are compelled to omit the remainder till next month.—Eds.

To the Directors of Agricultural Societies in Upper Canada.

Our sincere acknowledgments are due for the flattering encouragement which this paper has received from the friends of Agriculture in Upper Canada; and in order that our labors may exert a more general and effectual influence for the improvement of that Province, we wish to make one or two suggestions for the consideration of the Agricultural Societies.

From much observation and inquiry made during a late tour in that country, we are convinced, that with the liberal aid which is rendered by government, much more can easily be done for the advancement of Agriculture in that rich province than is done at present.—The principal difficulty which exists is a want of a proper *stimulus for the mind.* The farmers do not rightly estimate the advantages which they possess; or appreciate the dignity and importance of their profession.—Their minds are not sufficiently interested in their calling, and therefore it is obvious that the first thing to be done, should be *to persuade them to read on the subject.* Let them be often informed what other farmers, and other societies have done, and are now doing in their own and other countries, and they will not long feel indifferent on the subject of improvement, or be contented with present attainments. An active spirit of emulation and enterprize will soon be excited, which will effect a most salutary change in the character of their agriculture, and impart new life to their societies. We are convinced from observation and experience, that no Agricultural Societies can long be sustained with much spirit and usefulness, unless the members generally are readers of some spirited agricultural periodical; and nothing at so little expense would do as much for the improvement of Upper Canada as the general circulation of a paper, containing interesting intelligence and valuable essays on improved husbandry. It is admitted that such a paper cannot be published in that country now with much chance of success, and therefore, at the suggestion of some warm friends of the cause, we make the following proposition:—If the Directors of the Agricultural Societies will make arrangements to place the New Genesee Farmer in the hands of each of their members, we will devote a portion of the paper to Canadian intelligence, and make arrangements with the Presidents or Secretaries of the different Societies to send us important and interesting intelligence; and also engage the assistance of some of the best writers in that Province for the especial benefit of our Canadian readers. Our proximity to that country, the facilities for communication, and the similarity of soil and climate, give our paper nearly all the advantages of one published in that country; while our present list of able writers, and the extremely low price of publication, are advantages which could not be equalled on that side. Our terms to companies are *only forty cents* per year; and if they are paid for out of the funds of the Society, of course two-thirds of the amount comes from government. If it was made a rule, as some have suggested, that when a member pays his annual subscription for the Society, it shall be understood to entitle him to the paper for a year, it would doubtless induce many more to subscribe, and thus greatly extend their usefulness. We are certain that so trifling an amount could not possibly be expended in any other way so as to produce as much good to the Societies and to the country at large.

We hope the subject will receive early attention, so that the Societies can provide themselves with the present volume complete, as it is very necessary that the numbers be all preserved for future reference. We have personally suggested this subject to the officers of a number of the Societies, and it meets their cordial approbation. They hope that all the Societies will enter into such an arrangement, in order that there may be union of effort, and a mutual understanding throughout the province. We shall be happy to hear from all the Societies on the subject during the coming month.

BATEHAM & MARSHALL.

Rochester, N. Y., July 31, 1840.

Cleaning Clover Seed--Inquiry.

Messrs. Editors—One great defect in our farming is the insufficient use of Clover, and this is in a great measure owing to the difficulty of getting seed. Many of us have not a proper knowledge of the necessary machinery or the method of cleaning it; and if you, or your correspondents, can throw some light on the subject, you will much oblige many Canadian readers. Yours, &c., S.

Port Hope, U. C.

Remarks.—We wish some one of our correspondents, who is familiar with the process, would furnish an answer to the above.—*Eds.*

Making Cheese--Inquiry.

Messrs. Editors—If some of your correspondents would give the simplest and best method of making Cheese, they would at least oblige one reader. S.

Cutting Grafts in Autumn.

A correspondent writes, "A friend who intends emigrating to Illinois in the month of September, is desirous to be informed if scions for grafting may be cut and transported at that season of the year."

Grafts may be safely cut at any time in autumn after the shoots have stopped growing and have formed a terminal bud. This takes place much sooner on some trees than it does on others. In the *latter part* of the next month, grafts may in most cases be found, sufficiently matured for cutting. They should be wrapped well in damp moss for carrying, and then buried in the earth till wanted.

Correction.

At page 72, we said "The yellow bloom of the *Hypoxis* is only seen on close clays." We had not observed this plant except on close clays, and this agreed with Elliott's observations in the South. Besides we had tried it in garden loam where it declined and died. We have since seen it however, on sandy soils. It would seem that *water* is injurious to the bulb. In loose sub-soils it can dry away, and clays exclude it by swelling and closing up.

Importance of the Education of Farmers.

MESSRS. EDITORS—Although much has been said of late upon the education of farmers, still much more needs be said before the minds of the farming community will be properly awake to this subject. It ought to engage the pen of the ablest writers; it ought to be published in every paper, and proclaimed upon the house-tops, that *ignorance* is the greatest obstacle in the way of successful farming. If any profession on earth requires its followers to be well educated men, thoroughly acquainted with the laws of nature, it is that of Agriculture. In order to success in almost any business in life, it is necessary that those engaged should be well acquainted with the first principles of the profession. Especially is this true of farming. And yet how many there are who are engaged in this important business who are wholly ignorant of its first rudiments. No other profession has ever been the subject of so much abuse by reason of ignorance as this. Before men can engage in most other callings, they must first serve apprenticeship and give a year or more of their service, or they must spend seven or eight years and many hundred dollars in study, before they can be considered as prepared to engage in the intended profession. But any body can be a farmer, is the general opinion. Any body knows enough for that. No matter indeed whether they be any body or not, if they are only in the shape of a man. No matter whether they know A from B, or whether they suppose the moon is composed of the same material as our earth, or whether it is made of green cheese. No matter whether they suppose the earth revolves around the sun and is governed by the fixed laws of nature, or whether it stands upon the shoulders of four huge elephants. No matter at all about these things, if they only know how to plough, sow their grain and cover it up; this is all that is necessary. This has been the too prevalent opinion, although I am glad to say it is fast doing away. Farmers education has been greatly neglected; they have generally thought that to educate their children was unnecessary. With many the opinion prevails that if they can only read well enough to read a newspaper, (seldom though that they take one,) can write a little, understand arithmetic well enough to add and substract, their education is sufficient. To study Grammar and Geography would be worse than useless. As the former would make them talk more politely and correctly, and politeness is something that belongs to gentlemen, not to farmers. The latter would make them more acquainted with the world, and therefore create in them a desire for traveling. Philosophy, Chemistry, Geology, Botany, Minerology, &c., which are very essential to good farming, are entirely beyond their comprehension, and are generally supposed to be Greek or Latin words. For such people to send their children to an academy, would, of course, spoil them, as it would make them lazy and proud. And this latter objection may be sometimes true; but it is always with those whose natural abilities are not sufficient for a farmer. Therefore, some other business, to which such ones always flee, would be better for them.

What I have said, is not true of all farmers. Yet it is too much so with the majority; and its effects are plainly to be seen. By reason of such ignorance they are frequently duped and defrauded in their intercourse with the more enlightened. By reason of such ignorance they have come far short of that profit which they might have realized had they been more thoroughly acquainted with the principles of farming. And, as a consequence, farmers have generally been considered inferior to persons of other professions; and, therefore, farming has been looked upon by many as rather a low and degraded calling. And farmers have been contented to have it so. They have not considered themselves as good as other men. Like the African slave, they have been too willing to be trodden down by those whom they considered their superiors. They often regard men of other professions far above themselves. But this should not be. Farming is the most important, and it should be considered the most honorable, occupation in the world. Let farmers arise and take a proper stand in the community, and no longer let it be considered degrading to be a farmer. Let farmers become educated men. By becoming educated, I do not mean that they must be college educated; but let them be instructed in those sciences which are necessary to a thorough knowledge of their profession. Let them be thinking, intelligent men—men of sound minds and honest hearts.

But, one more idea, and I have done. That is this, Farmers compose three-fourths of the inhabitants of this great republic, and upon them, therefore, rests the destiny of this nation. How important, therefore, that they be intelligent, educated, thinking men. Do they consider this? Then let them prepare their sons and daughters to fill a station so high and important Let them prepare their sons for seats in our Legislatures and our Congress; and I verily believe were these bodies now composed of farmers, we should not see that discord which now prevails in our national affairs. K.

Le Roy, June, 1840.

For the New Genesee Farmer.

Noxious Weeds.

MESSRS. EDITORS—The farmers in this section are letting their farms get overrun with noxious weeds, which will be the means, in a few years, of ruining their best lands, so well adapted to growing wheat. It is only a few years since the farms in this quarter were entirely free from foul stuff of any kind, but of late years, the farmers have become more negligent, and therefore we cannot expect otherwise, than to see the spread of noxious weeds of every kind.

Almost every field in this section and elsewhere where I have traveled, contains more or less of the Canada Thistle, *(Cnicus arvensis.)* To destroy them, some propose ploughing them three or four times in the course of the summer. Others have proposed mowing them as often as they make their appearance above the surface of the earth. But the way to destroy them, is by ploughing and dragging as often as twice in a month through the season; by thus doing they can be entirely destroyed. Johnswort, (Hypericum *perforatum,)* is also becoming very prevalent, and is a very bad weed. Also the Yellow Daisy, *(Chrysanthemum lucanthemum,)* and Sweet Elder, *(Sambucus canadensis).* The Elder in many places in this vicinity, has almost destroyed large fields, which would otherwise be first rate lands. The Milk Weed *(Asclepias syriacus,)* is a very destructive weed, but is very easily subdued, by cutting them as often as they appear. I know fields that were a few years ago entirely covered with the milk weed, where now one can hardly be perceived.

The fact is, sirs, if we wish to destroy the above named weeds, it is highly necessary that we do it now, and not put off till to-morrow, because every year they will become more and more prevalent, and soon it will be almost impossible to subdue them.

The *Stein Caut*, or red root, *(Lithospermum arvense,)* is becoming very common in this region, and has been the means of almost ruining large fields of wheat. A neighbor of mine, has a farm of 130 acres, and the greater part of it is almost entirely covered with Stein Caut, the very worst of weeds among wheat. Fifteen years ago, such a weed was not known in this country—and might have been entirely kept out, if the farmers had been more diligent, and on its first discovery, destroyed it. A few years since a farmer of my acquaintance in this town, raised from nine acres sowing to wheat, 15 bushels of the Stein Caut—very clear seed too. He had not more than half a crop of wheat from the nine acres of land—which had it not been for the stein caut, might have been a great crop, as the land was of first quality. It is evident that the farmers must use some means whereby this noxious weed can be destroyed, or it will be entirely useless to sow wheat.

OBSERVER.

Growing Evils--Canada Thistles.

MESSRS. EDITORS—Having occasion, not long since, to pass through an adjoining town, my thoughts naturally turned to the subject of farming; and as I compared the different farmers together, I thought to myself there is much room for improvement among this class of society which is so often termed the most independent; and *growing evils* were creeping in among them unawares. Occasionally there is a farm to be seen, which looks as though the owner intended to do justice to it, hoping, doubtless, to receive a rich reward for his labor. But he has powerful enemies to contend with. In an adjoining field, owned by his neighbor, several large patches of Canada Thistles were to be seen, growing luxuriantly, accompanied by a good quantity of other evil weeds. Perhaps the Thistles were destined to be mowed down, or in some manner destroyed, but he who has this task allotted him, often overlooks a part of them, (perhaps from a want of interest on the subject,) and they are permitted to go to seed and spread from field to field.—Thus it is from the carelessness or ignorance of one man, that anothers cares are increased. Often do we hear it remarked, "You have a fine crop of Canada Thistles, and why don't you destroy them." "Oh, I have tried and tried, and all that I can do only makes them worse." The fact is, he has only made a mock trial, and as long as he continues so to do he will find himself surrounded by growing evils. As yet I have mentioned but one of the growing evils of our country, and if there were no more, would not *this one* be sufficient to require action on the subject of growing evils? Is it not a subject which demands the attention of every Farmer? Do you ask for a remedy? Peruse closely your agricultural paper and you will find several, but they will avail you nothing unless you practice them. Furthermore, use your best endeavors to persuade your brother farmers to become subscribers to some good agricultural paper, that the mass of farmers may move together, and be active and united on this subject, and then you may anticipate a victory over these and other growing evils. SPUR.

Education of Farmers' Sons.

MESSRS. EDITORS.—If a farmer's son knew something of botany, geology and agricultural chemistry, he might still be a rustic, but not an ignorant man.—As he pursed his daily task he would find himself in that school of nature, where she lightens physical toil by unfolding to the mind at every turn of the plough, the rich treasures of her kingdom, and the wonderful secrets of her laboratory. But when grossly ignorant of that science which encircles his daily professions, his situation is almost as hopeless, in point of intellectual knowledge, as that of the native Shiek of the desert, who asked Savary, the French *voyageur*, whether the English or the French made those Ruins.

Ignorance in the farmer is more palpable than in those classes who herd together in cities and villages. In the latter places the most limited information is often concealed by a sort of showy flippancy, acquired by that daily practice which the farmer cannot have.

Far be it from me to deny the farmer's son a classical education;—I am also aware that without a knowledge of some of those languages from whence the English is derived, a truly literary character can hard-

ly be formed; still I must insist, that to a farmer, these studies are not the "weightier matters of the law." I would have him first learn to know something about those sciences which pertain to agriculture. He should know that wheat cannot degenerate into chess; that in sandy land the fertilizing gasses of manure do not escape by "leaching." That rotten, exhausted manure is not as valuable as it is in its unfermented state, &c. &c.

I repeat, that if a farmer's son has a knowledge of the theory as well as the practice of his own calling, he is one of nature's noblemen, and he will never be considered as either ignorant or vulgar. S. W.

Seneca Co., July 12, 1840.

Irrigation.

Messrs. Editors—In England, where they know hardly any thing about our scorching suns, I am told that irrigation is always practised where the situation will admit of it. How much more necessary then is it in our climate. I have a clayey garden on the bank of the Seneca Canal,—it lies from a level to three feet below the surface of the canal. Until this season I have taken no pains to let the water on to it; but the dry, hot weather now set in so early, that I could but sympathize with those suffering plants which had not yet acquired sufficient size or depth of root to resist its power. I let in the water through small gutters between the hills and rows of vegetables. Its genial influence was instantaneous; in ten days my early potatoes grew two thirds in size of tubor. In fact I have never been able to get any thing like a fair yield of potatoes in this garden before. Cucumbers grew equally fast, even beans and marrowfat peas bore testimony to its quickening power.

I am of opinion that garden vegetables often suffer from want of moisture, that they stand still long before they exhibit a visible show of suffering; that a judicious supply of water, laterally applied, will perfect vegetation during the hot weather with ten fold rapidity. S. W.

For the New Genesee Farmer.

Farmers' Daughters.

Your fair correspondent Annette has hit off, quite to the life, the moral defects which a fashionable boarding school sometimes entails upon a farmer's daughter. Verily that rusticity which necessarily attaches to the present (but I trust not permanent) social condition of the farmer, is better, far better, than that affectation of effeminate gentility, which marks the character of so many school girls from the country.

But I apprehend that the boarding school (call it fashionable if you please) is not so much at fault as the previous domestic education of the pupil. Ill informed, unlettered mothers, and even fathers, have very crude notions of what ought to be learnt by their daughters, in order to make them truly genteel. Such is the great simplicity of some parents, that they look upon the teacher as a *magician*, who ought, for a sufficient *sum* of *money*, to transfer to the pupil the whole value thereof, like an article of merchandize. * Such parents are often so far mystified by the glitter and tinsel of fashion, and superficial accomplishment, that they count as nothing that discipline and laborious exercise of mind, so necessary to consummate the character of an intelligent, virtuous woman.

With such notions, imbibed from the parent, the daughter enters the school. From her more studious, plain, plodding school mates, she turns with distaste; while, to the idle, gossipping and extravagant—the fearfully excited spoiled ones of wealth, she clings with an admiring and even obsequious tenacity.

Hence it is, that, in spite of the discipline of the best school, the farmer's daughter sometimes comes out of it with few real graces, and less learning; with a distaste for the sober realities of her own home; with her head completely turned, a fit subject to fall a victim for life to some brainless coxcomb, or beggarly, untutored fop ! ! !

A good education must begin at home,—the fallow ground must be prepared there, by patient and early labor, or the crop will be choked by unsightly weeds ! !

Seneca Co., July 19, 1840. LUBIN.

From the American Farmer.

Our own Husbandry.

Not our *own, but the Husbandry of* Mr. A. Drew, *Editor of the "Maine Cultivator."*

We do not know when we have read any thing with more satisfaction than we did what follows, from the pen of a brother quill-driver—but how can one be called a quill-driver, who inflicts it upon his readers, as we do, with a *steel pen?*

There is, they say, no mode of teaching so emphatic and effective, as that of teaching by *example!* We may write much, and with some effect, on manuring highly, and well cultivating a little land, in preference to going over a large surface to obtain the same results, with five times the labor; but how much more efficacious is the lesson when practically taught? When, as in this case, the Lecturer tells how he actually *drew* support for his family—in vegetables, pork, mi'k, and butter from a single acre! Most gladly would we imitate our worthy brother who cultivates his acre "mostly with his own hand." We have long been a convert to the *theory* of plentiful manuring and careful cultivation; and no one entertains a higher notion than we, of the *healthfulness of agricultural labor!* Of all pursuits, the ploughman's is the most wholesome as well as *upright*,—but we must confess, that after repeated trials, we have found all actual labor, actually very fatiguing! The axe—the hoe—the spade—the scythe, and the plough, have each had its brief trial; but, to our shame, we admit that with neither could we keep up our intercourse long enough to contract that familiar acquaintance which is necessary to a certain slight of hand, without which, unfortunately, they cannot be handled with advantage. Few things are so entertaining as to stand by and direct and see others work—so much so that we are even playing overseer without wages. But let not our reader's attention be any longer drawn from Mr. Drew.

"The Editor's notions may be peculiar, but he hardly thinks that it is necessary for a man to skim over his hundreds of acres for the security of stinted crops, in order to *qualify* him as a practical writer on the subject of agriculture. On the contrary, he is inclined to think, that even "a little land, *well tilled*," by him, gives him as good a claim to speak by way of suggestion and advice, as if he were a *larger* and more *slovenly* farmer. True, all his land is a garden; but this is only what, or nearly what, every farmer should make of all which he cultivates. What is the use of skimming over ten acres to obtain what might be secured from a single acre? Must he who does *that* be called a *farmer*, whilst he who does *this* should be set down as wanting in a *practical* knowledge of the principles of agricultural economy!

The Editor actually *cultivates* but a single acre of land, but *that* he does *cultivate*, and makes it yield all that land *can* yield. Nor, small as the quantity is, is the amount of substance obtained from it unimportant in the support of a small family.—One-third of an acre he devotes annually to corn—the long eared, large clevelled, eight rowed, yellow corn, that is not very early, and not very late. With him, it has ripened every year for the last ten years that he has cultivated it. The soil he makes rich. He applies to it, before manuring, at the rate of eighteen or twenty cords of long manure to the acre, (or six to the third of an acre,) and turns it under by the plough. He plants the hills three feet and a half apart one way, and three feet the other—*exactly* by mensuring with a line. In each hill he deposites either a shovel full of old rotted manure, or as much night manure as will not over stimulate the crop. From this third of an acre he has realized on the average for years, over thirty bushels of sound corn for grinding, besides a *little* pig corn for the hogs in the fall of the year. This is as much corn as he needs in his family; besides a sufficient surplus for fattening one large or two small hogs. From the same land he ordinarily obtains some two or three hundred pumpkins, which serve important purposes in the family, besides being an excellent article for boiling up with the hog's potatoes, giving a cow, &c. From the same land, too, he has generally obtained all the dry white beans he has needed in his family to go with his pork—which he raises by the avails of his land, without purchasing of others. The corn fodder is carefully cut and cured, and helps as a subsistance for the cow. So much for *one-third* of an acre.

A small portion of land is set apart for the cultivation of onions. Ordinarily he has raised from fifty to seventy-five bushels on a bed, say half a dozen rods square. These he sells, on the average at one dollar per bushel—say for $60 per year. This purchases his rye and flour at common prices. So that from the first third of an acre, and an onion bed, he raises all his bread—brown and white.

On one or two large beds, he grows about fifty bushels of mangel wurtzels and carrots. These are for the cow's winter provender. They more than pay for themselves in the milk and butter—to say nothing in the saving of hay and other provender. With a *very* little hay, together with the corn fodder and roots, a good cow—and he finds it economy always to keep the best—may be kept through the winter.

Potatoes for summer and autumn use, are planted on the margins, and wherever there is a vacant chance for a hill, and a department is expressly devoted to them, large enough to raise all that are wanted for the table—and enough to spare for the hogs, &c.

So far, as relates to bread, butter, pork—and he might add, poultry.

Then the rest of the land is devoted to—too many things to be mentioned here—beets—parsnips—cabbages—turnips—green beans—peas—green corn—cucumbers—melons—squashes, summer and winter sorts—&c. &c., besides fruits and flowers of various kinds;—grapes, Antwerp raspberries, black do., currants, white, red, black, and yellow;—English and common gooseberries—and a few choice apple, pear, plum, cherry, and quince trees. All this is from a single *acre*, which he cultivates mostly with his own hand—the same hand that guides this pen;—preferring to do the work himself, not only by the love he has of it, but because he can do it more to his own satisfaction than can any gardener he can hire. As to the practical labors in this matter, he would not willingly yield to any one hereabouts. At least he has never had a man to work for him—how high soever he might stand as a gardener—whom he could not teach."

Another leaf out of the same book.

"Squashes.—If you would raise squashes for winter use, mark out on the surface of the land six or eight spots for hills, eight feet apart each way. Then take a spade or shovel and dig out a circle, say three feet in diameter, throwing the earth out six inches deep. Into each hole empty a wheel-barrow load of old rotten manure, mixed with ashes,—and if there is a little lime in it, so much the better. On this draw the loose earth back which you throwed out of the hole. Now take your spade and dig and mix the soil and earth well together, taking care to pulverize the whole mass faithfully. Level the top off and sprinkle half an inch of rich loam over the top. Drop a dozen seeds on the hill, and press them an inch beneath the surface with the finger. With a hoe smooth and press the top down. If you have a box fitted to receive two or four panes of glass, put this on a hill—or rather, if you have such a thing, place it on the hill before you plant the seeds, and drop them all within the frame. Ultimately leave not more than two plants in the hill to stand. You will find that these will, in due time, run out and cover the land all over, and produce you more, larger and better fruit, than if you had the hills nearer together, or allowed a greater number of plants to stand in the hill. It is well, however, to plant enough in the first instance, as a contribution to worms and bugs. If you save two healthy plants out of the dozen that came up, you will do well, and these will be enough. The roots of squashes under ground, will extend as far and occupy as much space where the soil is free and loose, as the vines will cover above ground."

A Large and Productive Grape Vine.

There is a Grape Vine at Castleton, Ireland, which is 100 feet in length, and so luxuriantly productive as to make it necessary for the gardener to thin it by cutting off 2000 bunches, leaving 3500 bunches on the vine.—*Eng. paper.*

The more pressing is the call, the more ought we to be convinced of the necessity of paying immediate attention to it.

*To the gross ignorance and credulity of such parents, (and they are legion,) must be attributed the success of that host of empirics, who go about the country pretending to teach the art of writing (Chirography) in twelve lessons; the whole spoken and written language of the French in twenty lessons; and Piano Forte music, to the most obdurate taste, or intractable mechanical ability, in as many more. L.

Agricultural Fair at Rochester.

TO BE HELD ON WEDNESDAY, 7TH OCTOBER, 1840.

At a meeting of the Executive Committee of the Genesee Agricultural Society, held at the Arcade House, Rochester, the 28th of July, it was

Resolved, That the Annual Fair of the Society be held at Rochester, on the first Wednesday in October; being the second day of the great Annual Fair of the Mechanic's Association of Western New York.

It was further

Resolved, That premiums be awarded for the following enumerated articles: the amount of each premium to be decided at a future meeting of the Committee, when some estimate can be made respecting the funds of the Society.

ANIMALS.--HORSES.

1. For the best Stallion,
2. Second best do.,
3. Best breeding Mare,
4. Second best do.,

CATTLE.

5. Best imported Bull,
6. Best improved native bred do.,
7. Best imported Cow,
8. Best improved native bred do.,
9. Best yearling Bull,
10. Second best do.,
11. Best yearling Heifer,
12. Second best do.,
13. Best Bull Calf,
14. Second best do.,
15. Best yoke of Oxen,
16. Second best do.,
17. Best yoke of 3 year old Steers,
18. Best yoke of 2 year old do.,

SWINE.

19. Best Boar, showing the most thorough breeding, and uniting the most valuable qualities,
20. Second best do.,
21. Best breeding Sow,
22. Second best do.,
23. Best 3 pigs, not more than 7 months old,
24. Second best do. do.

SHEEP.

25. Best Buck, uniting the most desirable qualities both for the fleece and for the carcase,
26. Best do. for the carcase only,
27. Best do. for fleece only,
28. Best 3 or more Ewes, as in 25,
29. Best 3 do. as in 26,
30. Best 3 do. as in 27,

FIELD CROPS.

31. Best acre of Corn,
32. Best acre of Potatoes,
33. Best ¼ acre of Ruta Baga,
34. Best ¼ acre of Mangel Wurtzel,
35. Best ¼ acre of Sugar Beets,
36. Best ¼ acre of Carrots,

DOMESTIC ARTS.

37. Best pound of reeled raw Silk,
38. Best pound of sewing Silk,
39. Best 5 pounds of Cocoons,
40. Best specimen of domestic manufactured Silk,
41. Best Silk hose or stockings,
42. Best 10 yards domestic Flannel,
43. Best 10 yards domestic Fulled Cloth,
44. Best 2 Palm Leaf Hats,
45. Best 2 Straw or Leghorn Hats,
46. Best 25 lbs. of Maple Sugar,
47. Best 10 lbs. of Beet Sugar,
48. Second best do.
49. Best 25 lbs of Honey,
50. Best 25 lbs of Butter,
51. Second best do.,
52. Best Cheese, of not less than 20lbs.,
53. Second best do.,

AGRICULTURAL IMPLEMENTS.

54. Best Plough, shape and manufacture,
55. Second best do.,
56. Best Harrow,
57. Best Cultivator,
58. Best Planting Machine or Drill,
59. Best Horse Rake,
60. Best Thrashing Machine and Horse Power,
61. Best Fanning Mill,

HORTICULTURE.

(A FUND RAISED BY AMATEURS AND GARDENERS.)

A premium will be awarded for each of the following articles:—

The best 2 heads of Cauliflower, Broccoli and Cabbage—6 each of Beets, Carrots, Parsnips, Turnips, Salsify, Onions, Celery, Tomatoes—3 each of Pumpkins, Squashes, Muskmelons, Watermelons, and Eggplants.

Best dozen each, Apples, Peaches, Pears, Plums, and Quinces,

Best specimens of Grapes, ripened in the open air.

Best 2 boquets of cut Flowers.

Best assortment of Double Dahlias.

Best dozen do.

Discretionary Premiums will be awarded for such articles not enumerated, as the committees may deem deserving, according to the funds of the Society.

Explanations.—No person will be entitled to a premium, who is not a member of the Society.

All animals exhibited for premiums, must be owned and kept in Western New York.

The articles of domestic arts must be manufactured or produced in this country, this year, by the person or the family by whom they are exhibited.

No premium will be awarded for articles which are not deemed worthy, or where there is no competition.

Persons competing for the field crops, must measure, or weigh, a few rows or square rods of an average growth, in the presence of two disinterested individuals, whose affidavit, in writing, shall be given to the committee at the Fair. A statement of the mode of culture, kind of soil, &c. for each crop, is to be given for publication.

Ploughing Match.—If suitable arrangements can be made, there will be a Ploughing Match at the time of the Fair; notice of which will be given hereafter.

A Fair for the Sale and Exchange of Stock, will be held on Thursday, the day following the Exhibition, if deemed expedient by those most interested.

An Address will be delivered; and suitable arrangements made for such a Fair and Exhibition, as will do honor to the farmers of Western New York, and be worthy of the high reputation of "Old Genesee;" while at the same time, it cannot fail to exert a most powerful influence for the promotion of agricultural improvement.

(Further particulars will be given hereafter.)

L. B. LANGWORTHY, *President.*

H. M. WARD, *Secretary.*

To the Friends of the Gen. Ag. Soc.

Owing to the pressure of farming business during the past month, but little has been done by way of obtaining the signature of members for the Society, and only a few of the Circulars have been returned. The Executive Committe therefore request the friends of the cause, to retain the papers another month, and make an effort to obtain as many names as possible, in time to report them to the Secretary, by *the 10th of September* next.

All Post Masters in this and adjoining counties, have received the Circulars, and they are respectfully solicted to give this subject their attention, or place the papers in the hands of some suitable person who will attend to it.

A Meeting of the Executive Committee

Of the Genesee Agricultural Society, will be held at the Arcade House, Rochester, on Saturday, the 12th of September, at 11 o'clock, A. M., to appoint committees, and make arrangements for the coming Fair. A full attendance is very desirable.

New Agricultural Societies.

The embarrassed state of the country, and the low prices of ordinary farm productions, seem to have a tendency to awaken the minds of the farming community to the necessity of a more varied system of husbandry, and of bestowing more attention to domestic arts and manufactures. For this purpose they see the importance of forming Agricultural Societies, and of encouraging emulation by exhibitions and the awarding of premiums. It is with much pleasure that we have seen notices of the formation of several new county societies within a short time past. Among them is one in Ontario County; but we have been so much from home that we have not learned the particulars concerning it.

The Genesee County Agricultural Society was formed at Alexander, early in July; and a constitution of the usual form for a County Society was adopted.—Mr. T. C. Peters of Darien was appointed President, and C. P. Turner, Esq., of Batavia, Secretary. Seven Vice Presidents and twenty-four managers (one from each town) were also appointed. It was resolved to hold an Exhibition and Fair at Batavia on the 14th day of October. A list of articles for which premiums will be awarded was published. We regret that the proceedings of this Society did not meet our eye in time for us to make room for them in our columns this month. We will give a more full account of this and the Ontario Societies in our next.

An Appeal from the Publishers to the Readers of the New Genesee Farmer.

We dislike to occupy our columns with our own affairs to the exclusion of other matters; but justice to ourselves and our readers, requires that we should occasionally make known our wishes and intentions.—When we commenced the publication of this paper, we were conscious that it was a great and arduous undertaking; but under a full conviction that such a paper was needed, and encouraged by the friends of the cause, we determined to engage in the business.—Aware of the prejudice and opposition which had been excited against the paper, we expected, as a matter of course, to have to wait some months before the public could rightly judge of our labors, and confidence be established. Many of our friends at a distance informed us that their neighbors declined subscribing, because they were afraid we could not succeed, and they wished to wait till they were satisfied the paper would be sustained. Others thought we could not obtain the aid of writers and corresponents of sufficient talent to make the paper respectable, useful, and interesting. These were natural excuses, and we did not complain; but now we have been eight months before the public—*now*, what say these fearful ones? Have we not fully redeemed our pledges, and maintained what we assumed? Cannot the paper be sustained, and have we not obtained the assistance of a large number of the most talented and practical writers in this or any other country? Is not the paper as respectable, as useful, and as interesting as its predecessor, or any similar paper in existence? Is it not better calculated to advance the interests of agriculture generally, during these times of pressing economy, than any other publication! If these questions are answered in the affirmative, as they already have been by hundreds of our readers, is it not the duty of each of them to do something on their part to assist us and extend our sphere of usefulness? It is true

many of our friends have done nobly, and perhaps our success is as great as was to have been expected under all the circumstances; but it is also true that many have not done what they could, or what we consider *their duty to us and their neighbors requires of them*,

We frequently find respectable farmers who have never been shown a copy of the New Genesee Farmer, and would readily have subscribed for it if they had been solicited to do so. There are thousands of such farmers in the land, and one or more can be found in almost every neighborhood. We are quite sure that if our readers would *only try*, our subscription list would be doubled in less than one month.—We know the cry of "hard times" is still sounding throughout the land, and we *feel* there is too much reason for it; but at the same time we are unwilling to believe that the farmers of this rich country are unable to raise fifty cents, or that they are unwillling to give it for this paper, if some friend would rightly present the subject to them. It may be that some have relaxed their efforts, from the belief that enough has already been done to secure the support of the paper; but we are sorry to say such is not the case. The present list of subscribers will not pay the expense of publishing the present edition through the year; and although we have pledged ourselves to continue its publication through the year, we will not promise that it shall be continued any longer than that time unless there is a considerable increase of subscribers. We should exceedingly regret the discontinuance of the paper, and so we know would hundreds of others, but when we have sacrificed time, labor, and health in the undertaking, without compensation, it cannot be expected that we should sacrifice money also. We know our readers will not ask it—*we do not believe they will allow it*.. If we judged rightly last year when we declared that the agricultural community of Old Genesee and the Great West demanded the continuance of the Genesee Farmer, we shall expect to receive a speedy answer to this appeal; but if we were mistaken we must abide the consequences. *Readers, what is your answer?*

BATEHAM & MARSHALL.

Rochester, Aug. 1, 1840.

A Voice from Michigan.

The following letter is one among many of a similar import, which we have received during a few months past, from various parts of the Western country.—*Eds.*

Messrs. Editors—I wish, through the medium of your paper, to address a word or two to the friends of Agriculture generally, and particularly to those of the West. I have waited until more than one half of the first year of the "New Genesee Farmer" has expired, that I might judge correctly of its merits, and of the spirit with which it would be sustained, before taking any active measures for its support. But although at first prejudiced against it by cautions which were issued by L. Tucker in the old Genesee Farmer, and continued after "the project of J. E Force" was abandoned, I have become satisfied, and doubt not all of its readers are also, that whether the New Genesee Farmer has the spirit of the old or not, it is managed with a spirit and ability which will not suffer by a comparison with any other work of its kind in the United States; and will I trust, be able to "*stand*" altogether on "its own merits."

The particular reasons why I would urge upon them its support are, first, that it is a good practical work, well adapted to the soil, climate, and mode of cultivation in the West; and second, that it is endeavoring to sustain itself in its infancy against a strong and unjust opposition; and finally, that it is not only for the interest of the farmer to read, but to support agricultural journals, particularly when afforded at the trifling expense of the one now under consideration. Cases very frequently occur in which the information contained in one number might be of more value than the cost of the subscription during the whole period of a man's natural life. I would therefore make this proposition to each of the subscribers of the New Genesee Farmer, that they, by their solications among their friends and neighbors, procure at least two new subscribers each, and as many more as they can. The money can be handed in to their Post Masters, who are all requested to act as agents, and who can remit the money free of postage. I willingly pledge myself to any who will take and read it all attentively, and will preserve the numbers, that if they do not feel satisfied at the end of the year, that they have received the full worth of their money, if they will forward me their papers, I will refund their money, postage and all, in full.

By thus affording this trifling aid, which is in the power of all, we may sustain a paper which will not only be a benefit to ourselves, but to our country at large.

Messrs. Editors—Enclosed, I send you three dollars for the persons whose names are annexed. I will endeavor to obtain more subscribers soon.

Yours, &c.,

J. F. CHUBB.

Byron, Kent co., Michigan, July 1840.

Hints for the Month.

The wheat crop being gathered, farmers should now spare no pains to procure clean seed for the succeeding crop. The best varieties of wheat should be sought, and the seeds of all weeds, especially of chess, carefully cleaned out.

Weeds should not be neglected at this season. Corn should be cleared of them, late in the season though it may seem. It will save much labor next year. A piece of ground was kept clear of weeds during the season; another, adjoining, but imperfectly; the following year the mangel wurtzels on the former piece were cultivated with very little labor, on the latter they were overrun with rank weeds.

Canada thistles will need attention, that they do not ripen their seed. Field thistles in pastures should be destroyed. Mullins eradicated.

Root crops, too often neglected in this month, should be kept clean.

Under draining on wet grounds, is best performed about this time. Farmers, to cultivate their fields profitably and satisfactorily, should have all parts equally dry; all wet portions should therefore be made dry by ditching.

Open drains are useful only in carrying off surface water, covered ones for wet grounds and springs.—Open drains are necessarily shallow, or else very wide, and always occupy land; covered ones may be easily and cheaply made of any required depth, and occupy no land. Stones covered with slabs and then with straw, are an excellent filling where soils are friable and consequently apt to fall in.

Brush drains are made in soft soils where stones are scarce, by placing freshly cut branches of trees with the leaves on, in a sloping position in the ditch, the leaves upwards, and then filling in the earth.

Many farmers become discouraged with ruta bagas, from the great labor of hoeing at this time. To avoid this difficulty get the ground thoroughly clean before sowing the seed. Begin this fall, and plough and manure the ground; next spring plough and harrow several times at intervals. The weeds will be thus killed and the ground made in a first-rate condition, and the subsequent culture will be very trifling. By a similar course we have seen turnips raised at a cost of only a cent and a half a bushel. Don't give up before another fair trial.

For the New Genesee Farmer.

Bad Seeds—again.

I purchased in the spring, at the Rochester Seed Store, a small quantity of mangel wurtzel seed. Some of them I planted myself, and the ground being dry, I put them in about three inches deep, being resolved they should grow. Another portion of them I left for my hired man to plant, who, I ascertained, put them in still deeper. The first came up rather thinly, although abundance of seed was used; and the second scarcely grew at all. As some of my neighbors had been equally unsuccessful, the conclusion necessarily followed that the seeds, if not the venders, were no better than they should be.

Having some seed still on hand, and a little more vacant ground, after a rain I concluded to plant the remainder; but working rather in despair than in hope, I buried them only an inch deep, dropping them by the line without making any furrow. The result was they came up as thickly as could be expected from the best of seed with the best of culture. I concluded it must be rather a difficult business to pursue, where one's honesty was thus established merely by accident; and that before condemning others, we should be careful that we ourselves had done our part for insuring success. J.

Wayne Co., July 28*th*, 1840.

Remarks.—With all the precaution which can be used, seedsmen are liable to err, and have sins enough of their own to account for without being made a scape goat for others. Still they are generally made to bear the blame, not only for their own misdeeds but for the mistakes of their customers, and often even for unfavorable weather. A number of my customers have complained of the failure of Mangel Wurtzel, Sugar Beet, and Carrot Seed, this spring. But on investigation I have in most cases been able to account for the failure, without attributing it to the seed, although it is generally difficult, or impossible to convince the purchaser that the seed is not at fault. In some few cases I have known these seeds fail, where to all appearance they had been sown under favorable circumstances; and while I knew for a certainty that the seeds were good, I could not satisfy myself respecting the cause of failure.

The Mangel Wurtzel, Sugar Beet and Carrot Seed sold from the Rochester Seed Store this year, *was all fresh and good*. Most of it was harvested under my own observation; and its vitality was fully tested this spring. Many fine crops are now growing from precisely the same lots of seed as have failed entirely in some cases. In order to satisfy their minds, I now request that any persons who failed, if they have any of the seed left, will test it carefully themselves. If Mangel Wurtzel or Beet Seed, break open some of the capsules and pick out a few grains of seed without injury, and plant them in a box or pot of fine earth, which keep moist, and stand where it will not be exposed to the full heat of the sun. If Carrot Seed, soak it 48 hours in rain water, and sow it the same as the other. If done with care I pledge myself they will vegetate freely.

If any of the readers of the Farmer can throw any light on the cause of failure of these seeds when circumstances appear favorable for vegetation, I should be pleased to have them communicate through the columns of the Farmer.

M. B. BATEHAM.

Rochester Seed Store, July 28*th*, 1840.

Preserving Fruit Trees.—Where your fruit trees appear to be overloaded with fruit, it is better that you pick off a part before the weight is so much increased as to split and destroy the trees.

To the Editors of the New Genesee Farmer:

My circumstances have elicited a few thoughts on the practical application of one of the excellent code of "rules for a good neighborhood," which appeared not long ago in your valuable paper. The rule to which I allude I find in Matthew VII. 12, also in Luke VI. 31; the substance of which is, "Do to others as ye would they should do to you." If you deem my remarks on the application of this rule to a prevailing custom in our country, worthy of a place in the columns of the New Genesee Farmer, you will oblige your humble friend by inserting it.

The Golden Rule.

MAT. VII. 12.—*All things whatsoever ye would that men should do to you, do ye even so to them: for this is the law and the prophets.*

Were all men to regulate their conduct towards their fellow men according to this rule, no one will say that there could be any such thing as quarreling among men. All consent that the rule is a good one, and yet but few adopt it in their practice. The grand objection which individuals have to putting the rule in practice, is that others will not if they do; and therefore many adopt this rule, "to do to others as others do to them," as a rule better adapted to secure their rights. As a practical illustration of this latter rule and its evil tendency, I will relate an anecdote: In the early part of this season, as soon as the snow was gone, the farmers generally turned their swine into the woods to feed upon beech-nuts, which were pretty abundant in this vicinity at that time. Many complained that swine were very troublesome in their sugar works, as but very few had their sap bushes fenced, and more complained that while their sugar business demanded all their time, so that they could not repair their back fences, the hogs were crowding by scores into their fields and destroying their potatoes which were buried there. But no man seemed to think of the expedient of *taking care of his own* swine; because every man seemed to think that if *his* swine were taken up, *others* would trouble him about as much. A very few had their fields enclosed with a fence sufficient to secure them against swine, and they could turn out large numbers of swine of all sizes, and then say that they were willing their neighbors should do as they did. This is one way of observing the Golden Rule. But will those who thus accommodate the rule to their circumstances be pleased to have their neighbors who keep no swine accommodate the rule to their circumstances, by saying that they will kill all the swine that get into their fields, and they are perfectly willing that their neighbors should do the same? No, they will see that this is not acting according to the Golden Rule. No man who means to observe the Golden Rule as the rule of his actions, will suffer his animals of any kind to run where there is any probability of their troubling his neighbors, unless his circumstances absolutely require it, and then he will be willing to make restitution for all the damage they may do to any one. Neither will any man who acts according to the said rule, intentionally injure any of his neighbors animals that trouble him.

I for one do not keep any swine, for this reason:—Experience teaches me that pork is not the kind of food that gives me health of body and vigor of mind, and observation leads me to conclude that it does no afford to other men what it denies me. And I cannot but think that this was the reason why the Benevolent Lord prohibited the Israelites from eating it; and why the kind-hearted Jesus gave the devils permission to enter into the swine of the Gadarenes. Mat. 8. 32.

But as I wish to enjoy the right to my own opinion on this subject as well as all others, the Golden Rule teaches me to be willing to have all others enjoy the same right to theirs.

With regard to the expediency of the above rule, it is generally admitted that it would be expedient for all to adopt it if they would: but some think that it would be inexpedient for one to adopt it while another will not. Let one man be perfectly just to his neighbors, and if others will not be just to each other they will consider themselves bound to be honest with him. Though he may sometimes be called to endure grief, suffering wrongfully, will it not be a sufficient reward to be approved by his own conscience and by all his neighbors? And will not his neighbors think that his example, which they cannot but approve, is thy of their imitation? Such a man supports good and wholesome laws by obeying them, "for this rule is the law and the prophets."

D. A. SWEZEY.

Harmony, N. Y., July 17th, 1840.

The Curculio.—Pick up carefully all the fallen fruit under your trees, and give it to your hogs. You will thereby destroy the curculio, a small insect which has caused it to fall, and which if not destroyed will perfect itself in the fallen fruit, sink in the ground, and the next spring rise and again destroy your fruit.

White Cabbage leaves.—Cabbage leaves, a little meal, salt, kitchen swill, crumbs, potatoe peelings, &c., mixed well together, are capital food for fatting pigs—save all your ground leaves for this purpose.

From the Farmer's Monthly Visitor.

A Proposition.

FARMERS DEVOTE TOO MUCH TIME TO MANUAL LABOR.

No dictate of common sense can be plainer than that men, whatever be their pursuits, should make that use of time which will best promote the great objects of life. To pursue trivial objects, or to pursue those which are in themselves laudable, to the exclusion of others which have greater claims, is, therefore, alike unworthy of a rational being. The duties which devolve upon men are various. While nature calls upon them to make the necessary efforts to obtain the means of subsistence, she also demands that it be done in subservience to the laws of health. While the cultivation of the earth is an important duty, the obligation to cultivate the noble faculties of the mind is not on this account less binding. If the body has claims for food and clothing, the mind has claims not less obligatory for that moral instruction and intellectual training without which life is of little value.

Among the principal duties which rest upon the farmer in discharging his obligations to himself and family, appear the following:—Moral and Religious Instruction; Intellectual Education; the means of an honest support, and obedience to the laws of health. In attemping to show the truth of our proposition, it will be convenient to consider these separately.

1. Moral and Religious Instruction. To attempt any labored arguments in proof of the value of these, would be superfluous. But some seem to suppose that a sufficient acquaintance with the duties of morality and religion may be obtained on the Sabbath.—Now, while it is admitted that such instruction belongs more particularly to that season, there appears to be no valid reason for excluding it from the remainder of the week. If the practical duties which morality and religion enjoin, were of secondary consequence—if they were mere Sabbath-day exercises, such views might have some foundation; but as men are required to love their Maker, and do good to their fellow men at all times, reason seems to require that some portion of every day be devoted to the study of the principles on which these obligations rest.

2. Intellectual Education. Independent of that discipline of mind and that general information which every farmer should possess, no man can master the science of agriculture without much study and reflection. In farming, as in most other pursuits, theory and practice should be united. The farmer must not only labor, but he must read and reflect; and for these he must have time. The day has gone by when it was a sufficient excuse for following an observed practice because our fathers and grandfathers did so.—When the nature of our soil is under investigation, when the Press is teeming with information, applicable to all the various departments of agriculture, and when every man can contribute something to the general stock of information, has the intellect no claims upon the time of the farmer? When science is laying her treasures at his feet, can he shut his eyes to the advantages which are in prospect, and deny himself time to read, and to apply the principles of science and the discoveries of art to the practical purposes of life? If there be any obligation which is preeminently binding upon the farmer, it is to avail himself of those helps which the agricultural press is placing within his reach.

3. The means of support. It is a very plain duty which binds a man to furnish for himself and family an adequate supply of food and clothing, and a duty which farmers seldom overlook. It is in the performance of this that they consume much of the time that should be devoted to other purposes; or rather this furnishes the excuse which they offer for the neglect of the others. The common practice in New England seems to be to employ, for two-thirds of the year, almost the whole time, except what is necessarily consumed in sleep, to the labors of the field. The deadening influence which this practice exerts upon the mind is too obvious to require comment. Owing to this absurd custom, the winter evenings, which of the time left for improvement, become of comparative little value. Who, after eight months of unremitting toil, can sit down and spend an evening in vigorous thought, or even in such reading as requires attention?

But it is said that this is a matter of necessity—that all this labor only furnishes the bare means of subsistence. Doubtless many really believe this; but it is a reflection upon the goodness of the Creator to suppose that he would mock man by giving him faculties capable of improvement, and then placing him in circumstances which preclude their use. If men were less eager in their desires of gain, and more willing to follow nature rather than fashion in their manner of living, they would find less necessity for constant labor. But were there no means for lessening the expense of a family, it by no means follows that the present system must be pursued. It is not a necessary consequence, that if the farmer spends more time in intellectual pursuits, he must diminish his income. Agriculture is not yet so far advanced that study can afford no additional aids. Experience shows that those who labor the most hours are not the most successful, even in acquiring wealth. The inference is plain, that intellectual labor is no less profitable to the farmer than manual labor.

Of course no conclusion can be drawn from what has been advanced, in favor of idleness. Constant toil is infinitely preferable to sloth; but a division of between the mind and body is better than either.

4. Obedience to the laws of health. One great objection to the present system of labor is that it shortens life. By statistics which have been collected at different times, it appears that the average life among farmers is but little, if any greater than among professional men. Taking into consideration the known difference between active and sedantry habits in their effect upon the human constitution, no other satisfactory solution of this can be given than that the farmer shortens life as much by over exertion, as the professional man does by neglect of exercise. Indeed how often do we find farmers at the age of forty or fifty with the stiff joints and decrepid forms which belong to those of three score and ten? This is the legitimate effect of transgressing the laws of health. But besides the violation which is done to nature, this endless toil defeats its own object. The man who gains ten years for labor by neglecting to cultivate his mind, and wears himself out before the "debt of nature" is due, cannot surely be a great gainer.

These considerations, it is believed are sufficient to establish the affirmative of the proposition at the head of this article. OBSERFATOR.

Keene, Jan. 13, 1840.

The Farmer's Life.

BY H. COLMAN—AN EXTRACT.

What a means of imparting pleasure is an improved agriculture. How many charming examples present themselves among us of improvements which every eye gazes upon with unmingled delight. Let a man, according to his power, take his ten, his twenty, his fifty, his hundred acres. Let him comb the hair and wash the face of nature. Let him subdue, clear, cultivate, enrich, embellish it. Let him smooth the rough places, and drain the wet, and fill up the sunken, and enrich the barren. Let him enclose it with a neat and substantial fence. Let him line its borders and road sides with ornamental trees, and let him stock every proper part with vines and fruits. Let his fields and meadows wave with their golden harvest, and let his hills be covered with the herds rejoicing in the fulness with which his labors, under the blessing of God, have spread their table, and who, when he goes among them, hasten from all sides to meet him

and gratefully recognize in him a friend and benefactor, and lick the hand which is accustomed to feed and fondle them. Here now let us see the neatly painted cottage, with its green shads, its piazzas trellised with vines, its sides covered with the spreading elm or flowing acacia, with here and there the beautiful fir to shade the picture, and the mountain ash showing its rich clusters of crimson fruit among the deep green folinge, and the smooth and verdant lawn stretching its smooth and beautiful carpet in the front view; then look again and see the parents at the close of day, resting from their labors and enjoying the calm evening, with the pledges of mutual and devoted affections, rioting before them in all the buoyancy of youthful innocence and delight; and if, at such an hour as this, you can hear the hymn of grateful praise rising from this humble abode of peace and love, and its charming notes mingling with the music of the gurgling brook that flows near by, or broken by the occasional shrill and hollow notes of the gentle and fearless birds, which deem themselves members of this loving household; if then, whether traveler or sojourner, your heart is not touched with this charming and not unusual picture of rural felicity, cease to call yourself a man. If still you sigh for the bustle and the noise and the confinement of the city, with its impure water and offensive odours, with its despicable affectations, with its heartless formalities, with its violent excitements, with its midnight festivities; with its utter destitution of sympathy, with its low estimate of human life, with its squalid poverty, its multiplied forms of wretchedness and crime, its pride, its vanity, its ambition, its pomp, its servility; then go back to your gilded prison house, and to pleasures, which an uncorrupted and refined taste, accustomed to drink in the free air of heaven, and to appreciate its freshness, its purity, and its salubrity, will find no occasion to covet or envy. The man who by his cultivation and good husbandry, presents such a picture to the passer by, shall he not be called a benefactor to the community! Has he not done much to improve and bless society by his example? Has he not built a monument to his own honor more eloquent than the marble?

Dwarf Fruit Trees.

In some places, especially in France, a method prevails of cultivating dwarf fruit trees. These are said by English and French writers to have many advantages. The trees are not as much exposed to high winds, they produce better fruit, bear earlier and more abundantly.

Dwarf trees are produced by innoculating on stocks of comparatively slow growth. Thus by inoculating the apple on the Paradise or *Doucin* stock, the peach on a slow growing plum stock, and the pear on the quince, &c. This is practised here, more particularly, in gardens where the trees are set along, the borders alternating with gooseberries or currant bushes.

The pruning and management of dwarf apples and pear trees, are well described in the following remarks:

The first subjects of the following remarks, from their appearance, were planted six or seven years previously to the commencement of any pruning being given them. In consequence they required to be very much thinned out, so as to get the branches clear of each other. For thinning I always bore in mind to cut off the old wood close to the stem or branch it was attached to; this prevented young wood springing afterwards. When the trees were thinned of the old shoots, as above stated, the young side shoots were what is generally termed, spurred in; that is, they were so shortened, that only two or three buds were left on them, and the leading top shoots were shortened to half their length.

The following and every succeeding year, the trees were treated in the same manner, as respects the young wood, till they had acquired the desired height, when the leading shoots were shortened, as the side shoots or spurs had been previously. When the leading shoots show a disposition to grow very luxuriantly, which is apt to be the case under this treatment, they should be prevented doing so, by cutting off part of the old wood along with the old shoots immediately above a flower bud. This will prevent the shoot so cut from increasing in length. The spurs must be treated in a similar manner, by cutting off a small portion of the old wood along with the young, when they are getting too long.

I have never found the above treatment prevent the fruit swelling, or in any way detrimental to it; but on the contrary, it was always improved.

Young trees are to be treated in the following manner: if there are more than three shoots on the plant, reduce them to the number, and shorten each to three, four and six eyes, according to their strength. The following season reduce the number of leading shoots to six, and shorten them to three-fourths of their length, and spur in the remaining shoots. The tree should be managed in every respect in this manner until it has attained the required size, which of course depends on the convenience or fancy of the owner, or conductor of the garden.

I make a point of letting the trees take their natural form of growth as far as the system described will permit; for I consider it of little consequence what shape is given to the tree, provided my end is attained; that is, to make every branch as it were a long spur, with bearing buds from the base to the extremity.

Two or three years' trial of this method only, might possibly deter many from a continuance of it, in consequence of the quantity of young wood which will be produced yearly at first, and from the apparent difficulty of getting rid of the superfluity. But that inconvenience will be ultimately surmounted if the foregoing instructions are attended to, and the continuance will be the possession of both healthful and fruitful trees. To attempt to bring very old trees into this method of management would be attended with difficulty, unless they were cut down short and allowed to make new heads, which I should recommend where their produce can be spared for a time. In a few years fine healthy heads would be formed, which will yield fruit superior to any that could be expected from them if left in their rude state. But if the trees cannot be spared to be headed down, they may be very much improved by thinning out the spray, and cutting out a few old branches, which will cause them to throw out young shoots, and these in a short time will become bearing wood. The remainder of the old branches may be thinned out with effect. Even if this process is performed only once in two or three years, and the stem and branches well cleared of moss and dead bark, it will be of great service to the trees, and be a means of keeping them free from insects, and giving them a neat and clean appearance.—*Practical Farmer.*

Science and Agriculture.

Sir—I have for a long time been deeply impressed with the importance of agriculturists acquiring scientific knowledge, to assist them in bringing to perfection their truly honorable vocation; and I have been led to regret that very many of our farmers have forgotten, or never learned, that the true interest of agriculture is achieved only when the farmer can avail himself of the advantages which scientific knowledge places within his reach. Many farmers seem satisfied with the way in which their fathers trod in tilling the soil, satisfied in knowing *just as much* as they did, and perfectly satisfied in educating their children after the *old* fashion. Hence, seeming blind to the importance of a more liberal and enlightened policy, there are still, perhaps, some few farmers content if their children but learn to "read, write and cypher," ignorantly supposing that this is all-sufficient for a farmer; that as their fathers got on "well enough" with this amount of knowledge, their children can also do well enough without book learning. I will not speak of the fallacy of this kind of reasoning; I only regret that it is by far too prevalent.

The truth is, the agriculturist occupies an important station in society; no vocation is more honorable, and none, when properly pursued, that sooner insures competence. Hence the importance of acquiring such knowledge as will assist him in devoloping the resources of nature and bringing to his aid such means as will produce the most beneficial results in the cultivation of the earth. Every farmer should be an educated man; he should not be satisfied in being able to read and write, and "cast up accounts"—he should achieve more than this for himself, and *much more* for his children. He should be able to ascertain, by chemical analysis, the nature and properties of the soil he cultivates. As the science of chemistry is intimately connected with that of agriculture, he should be familiar with its principles, that he may reap the advantages which its truths reveal. He should be able to define the nature and properties of plants, vegetables and flowers, ever remembering that, ignorant of these things, he loses many opportunities, not only of profit but of enjoyment. Hence, the farmer should be a botanist, both practically and theoretically. This is not merely the opinion of the writer; every man with a just conception of the vast improvement of which the science of agriculture is susceptible, will subscribe to it all I have said. Mr. Van Bergen remarks, in his excellent address delivered before the New York State Agricultural Society, that the business of the agriculturist "involves the laws of chemistry, botany and geology. By the last he is to judge of soils and their fitness for certain products; by the second he must determine what plants are most suitable to his soil and climate; by the first he must be instructed in that most important branch of knowledge to the farmer—the nature and composition of manures, and their fitness to the several kinds of grain and fruits he proposes to cultivate."

It may be said by some one that he is too old to learn these things now; that while occupied in acquiring this knowledge, his farm would go to ruin! How utterly ridiculous! yet how often is the above remark heard! Every farmer, however, has some time to spare; there are seasons when, without any prejudice to his interest, he might employ himself profitably in the acquisition of useful knowledge, that would abundantly pay him for the time and labor bestowed.—But if too indolent or indifferent about the matter for *himself*, let him educate his *children;* and, as some one has aptly remarked, "let every farmer who has a son to educate, believe and remember that SCIENCE *lays the foundation of every thing valuable in agriculture.*"

I have said that the vocation of the agriculturist is an important and honorable one, and I believe it.—From this class of the community have arisen some of the brightest ornaments of our country; men who would have conferred honor on any station; and let our farmers but awake to a full sense of the importance of education, of *acquiring* knowledge themselves, of *imparting* it to their children, and *applying* it to their profession, and they will learn of a truth, "that all the energy of the hero and all the science of the philosophers, may find scope in the cultivation of one farm.—*Am. Far. Com.* J.

Centreville, Kent Co., Md.

Cabbage Plants.

A *sure*—but rather troublesome—protection of cabbage plants against the grub worm, is to go out into the woods and get lots of strips of birch bark from small trees. These will naturally maintain the shape they sustained on the tree—round like a wafer box, without top or bottom. They should be about two inches high or deep. Let each strip enclose a plant, and press it gently in the earth. The grub can then neither crawl under nor climb over it. Look he ever so wishfully that way, he cannot set his teeth into the delicious fibres of the young cabbage stalk.—*Maine Cultivator.*

White Grub Worm.—The white grub or "dung worm" which infests sward lands, and in some instances does great damage, by eating the roots of grass, is, when it emerges from the chrysallis state and becomes a perfect insect, what is commonly known as the May Bug, or cockchaper, which secretes itself by day and rises only by night. A good way to destroy them is to make a fire in the field after dark, by the light of which the swarms that arise from the earth will be attracted, and by the heat of which they will be destroyed. The perfect insect, as a flying bug, is quite harmless; but the eggs they deposite in the earth before they die, will generate myriads of new grubs which will do essential injury to the grass roots.—*Ib.*

To prevent the Destruction of Corn by Crows.

Mr. C. Nichols, of Mass., gives the following recipe for preserving corn from destruction by crows and blackbirds. Although out of season now, we put it on record for reference when planting time again approaches. We copy it from the Monthly (N. H.) Visitor.—*Am. Far.*

"In the spring of 1837, I ploughed a piece of mowing, which I wished to bring into a better condition, consisting of about one fourth of an acre, upon which I planted corn, and when up about three to four inches, these marauders came and destroyed full twenty-five per cent. of it. In the spring of 1838, I planted about three acres—the seed prepared agreeable to the recipe, and it all came up in seven days—and when at the height of the former, the enemies came, pulling a spear or two of three or four hills—tasted the flavor of the seed, and left them attached to the root of the stalk—which was the first and last of this visit. I imputed the effect to the seed being so strongly impregnated with the solution, that it was offensive to their taste.

Recipe.—Dissolve 2 lbs. of saltpetre in a pail full of soft water; in this situation I put 3 pecks of seed—soaked 24 hours—rolled it in plaster, planted and covered it while it was moist. It must not be exposed to the sun, or current of air, as evaporation passes off rapidly. As I remarked, every kernel came up in seven days. I think the alkali must have forced its germination, and the plaster had an effect to keep it in a state of moisture."

The Flowers of Summer.

The *White Lily* is much finer when it has some protection in winter. It will live without it for a time; but with us it has gradually declined when exposed in the open border. In the covered border, it seeme to be at home.

Lilium chalcedonicum (scarlet martagon) is beautiful, and the petals so revolute that some of them frequently clasp the peduncle. The stalk supports one or two flowers. It is a native of the Levant.

Lilium japonicum has declined with us of late years, and no longer produces flowers. This may be owing to deep planting, as Loudon mentions that some set the bulbs in pots, "not lower than an inch from the surface of the mould." Others take them up in autumn, and as they are tender, keep them in dry sand till spring in the cellar. We hope to profit by these hints.

Lilium tigrinum (tiger lily) from China is very hardy, and well suited with our limestone soil. With reasonab e cultivation, it grows five or six feet high; and produces showy flowers of a reddish yellow with dark spots, resembling the color of the tiger. The bulbs that form on the stalk, grow freely, and often flower the next season.

Lilium superbum does best in a boggy soil. In a shaded border of vegetable earth, it blossoms year after year, but not with the splendor it attains in its native localities. It is indigenous to some parts of this State.

Within a few years, the genus *Pentstemon* has furnished many interesting species for the garden. *P. digitalis*, three feet high with white flowers and large radical leaves, deserves a place. *P. diffusum* more humble and spreading, presents a greater variety of colors (light red tinged with blue.) *P. lævigatum*, very smooth and erect, has pale flowers striped on the inside with purple. *P. Pulchellum* very neat and pretty, varies in color; and gives florists an opportunity to multiply specific names.

Spigelia marilandica is interesting as the Pink Root of the shops; but it also has beauty and singularity.—Contrary to the usual order of flowers, the outside is a fine red, and the inside a light yellow. It is quite hardy in this climate.

On the *China Pink*, Nature has spread some of her finest colors; and seedlings vary much—some single, some double. In Loudon, this species is marked a *biennial;* but we have them three years old with no symptoms of decline. Ours were transplanted, which doubtless increased their radical fibres.

Chelone barbata though a native of Mexico, abides the winter in the open border. Its slender stems, sometimes five feet high, are ornamented with tubular flowers, light scarlet red on the outside, and striped within. It continues in bloom a long time.

The double *white Clematis* from Japan is very showy; but must be covered up from the cold in winter. It is a slender climbing shrub.

Clematis flammulus (Virgin's Bower) another limbing shrub, has white flowers, of little splendor ut much fragrance. It is a desirable plant.

Eschscholtzia californica (now altered to *Chryseis*) with large yellow flowers, is already naturalized to the gardens. The orange colored (*C. crocea*) is only a variety, though marked as a species.

Lythrum salicaria and *L. virgatum*, are nearly allied, but the latter is a more slender plant. The flowers are in verticillate spikes, of a red-purple, and both deserve a place.

Spiræa lobata, four or five feet high, a native of the oak openings in the West, presents masses of pale red flowers on the top of its stems. It has been much admired.

Yucca flaccida is one of the finest plants in the border. Its leaves are as green when they project through the snow, as they are in summer. The scape is 3 feet high, crowded with large white flowers; and in its time of bloom, we have nothing more splendid. No other species of Yucca that we have tried, agrees so well with our soil and climate.

Aconitum napellus (Wolf's Bane) has rather a lurid appearance, though it has long been considered an ornament of the garden. Another species with white flowers, very tall and erect, makes a fine display.

Stenactus speciosa is nearly allied to the Aster, with large flowers of a light blue, though some varieties are deeper than others. It is showy as its specific name implies.

The *Detroit or Michigan Rose*, which may be trained to the height of twenty feet, is the latest of all that bloom with us at one regular period. Seedlings vary with us, some deeper, some paler; but the flowers of each seedling, also vary in color according to their age. When these first open, the red is more intense, but they become paler with each succeeding day, fading at last almost into white, and as those of the same panicle are not equally forward, the diversity of color is very pleasing. In a hedge where it presents large masses of bloom, it is very splendid. A double variety has already originated, but we know nothing of its merits.

Orchis fimbriata is beautiful, and grows well in a shaded border where vegetable earth abounds. Each plant has one large terminal spike of pink flowers, varying however in the intensity of their colors.

Hydrangea radiata is hardy, though a native of the South; and round the circumference of its cymes are barren white flowers which are elegant. *H. quercifolia* however, from the same region, though more tender, is more showy. It has close panicles of a conical form, six or eight inches in length; while on slender peduncles the barren flowers project all round, so as to nearly encase the fertile flowers. When protected by deep snow until the keenest breath of winter has passed over, it does well. It is now beautifully in bloom.

Centaurea aurea on the top of a strong stem, presents its golden flowers. The heads are nearly two inches in diameter.

The *dwarf Horse chestnut*, spreading wide as it ascends to the height of five feet, and exhibiting its white flowers in long terminal spikes,—if not equal to the Asiatic Horse chestnut in beauty, excels all other species that we have seen. Many of the spikes are a foot or more in length.

Hypericum kalmianum is a sub-evergreen shrub of a round form covering itself with yellow blossoms.—*H. hircinum* from Calabria is tender, and killed to the ground every winter; but assuming the character of a perennial, it springs up three feet in summer, decorated with beautiful flowers. It is strong scented when rubbed or broken.

Silene regia from Ohio, erect, four or five feet high, with several stalks from one root, has blossoms of a glittering scarlet. Nuttall calls it "one of the most splendid species in existence."

Bocconia cordata, six feet high, produces its flowers of a slight blush, in panicles; and makes a fine appearance at a distance. Its leaves greatly resemble those of the Blood Root, and both belong to the same natural order.

The different species of *Liatris*, according to Loudon, are elegant plants. Two of these have come into bloom: one is *L. pumila*, and the other we imported from England without a name.

A species of *Galardia*, with purple disc and yellow rays, two inches in diameter,—though a straggling plant, is quite showy. It is a perennial.

Funkia cærulea (separated from Hemerocallis) is the tallest of this new genus that we have seen; and bears its pale purple flowers which are striped, in spikes that terminate the stems, two or three feet high. *F. lanceifolia* is a smaller plant with delicate blossoms of nearly the same color.

There is no finer scarlet than the flowers of *Lobelia cardinalis*. It grows naturally in damp ground near the borders of streams; and if removed to the garden should have a shady spot and deep vegetable soil.

Whoever admires the blue bells of *Campanula rotundifolia* will be pleased with those of *C. carpatica*, which is generally of a finer blue. It comes from the Carpathian mountains.

Coreopsis lanceolata is the most showy species of this genus in odour, since *C. tinctoria* has been removed to Calliopsis. It has beautiful yellow blossoms.

The iron fox glove (*Digitalis ferruginea*) is an old inhabitant of the gardens. Its erect stem, three or four feet high, is crowded with neat flowers, stained as if with iron rust.

Burnt Earth as a Manure.

We have used burnt earth as a manure for several years in our garden, which is *a heavy loam*, with great success. It has been mostly applied to the cabbage, the cauliflower, and the beet; but its effect on the last has been perhaps the most extraordinary. Some of the largest we have ever seen, were manured in this way.

To prepare it:—We have taken knotty logs, such as would be rather unprofitable to split, and laid three or four as a foundation to build on; and as every flower garden furnishes rubbish, we have collected it, and heaped it up as high as it was found convenient to manage. Such materials make rather a loose and elastic pile; but we have endeavored to lay them as compactly as we could; and then have had a man to stand on the top, and receive sods until the mass was pressed down into shape. Any earth that is foul with grass or weeds is thrown on, in the manner of covering a coal-kiln, leaving two holes on opposite sides to cause a draft when it is set on fire. As soon however, as the fire extends through the pile, the holes should be closed, so that no smoke be emitted. *Steam* will rise from the damp earth, but the *smoke* should be carefully confined.

We have generally burnt one or two cart-loads of earth at a time, because we were not prepared to burn more; but we presume that much greater quantities might be burned with the same fuel. The heat will continue many weeks, and the earth in the interior of the heap, will become of a brick-red. One or two shovelfuls may be applied to a cabbage, or it may be laid on both sides of a row of beets an inch or two thick. In England, where paring and burning is much practised, it is generally admitted by judicious farmers that *light or sandy soils are unfit for this operation*. Arthur Young says he "found burning injure sand." It can hardly be imagined," says Sir John Sinclair, "that fire would add any thing to the nature of sand, or render it more fertile. No turf that will readily harrow to pieces, ought to be subjected to this process." "All poor siliceous sands," says Sir. H. Davy, "must be injured by it. An intelligent farmer told me he had pared and burned a small field several years ago, which he had not been able to bring again into good condition. I examined the spot; the grass was poor and scanty, and the soil an arid siliceous sand.

Sir H. Davy refers the effects of paring and burning "*entirely* to the diminution of the coherence and tenacity of clays, and to the destruction of inert and useless vegetable matter, and its conversion into manure."

It is doubtful however, if these causes are sufficient to produce such effects. 1. The coherence and tenacity of clays may be reduced by mixing coarse sand without any such increase of fertility. 2. The best spots of our garden abound with vegetable matter, which of course cannot be inert and useless. 3. The quantity of coal in earth burnt to a brick-red is scarcely perceptible.

Sir H. Davy afterwards however, says, "If the oxide of iron in soils is not saturated with oxygen, torrefaction tends to produce its further union with this principle; and hence in burning, the color of clays change to red. *The oxide of iron containing its full proportion of oxygen has less attraction for acids than the other oxide*, and is consequently less likely to be dissolved by any fluid acid in the soil; and it appears in this state to act in the same manner as the earths."

Dr. John Davy suggests that a "thin layer of clay may prevent rain water from penetrating deeply and saturating the sub-soil which would be corrected by paring and burning." It is known that all clayey soils are glazed after a heavy shower of rain; and consequently their absorbed power is checked or prevented from acting. Where the burnt earth has been applied to the surface, we have observed that in time of drought the soil was moister than in other places. This observation will not disagree with G. Stafford's remark in the (English) Horticultural Register, that burnt clay "seems to be possessed of the medium of holding just a sufficient quantity of moisture and no more."

He suggests other causes however, that may concur to render this manure so valuable: "The burning entirely destroys every species of insect and pernicious weed; and on whole quarters where the process was performed many years ago, I have scarcely observed either slug or snail."

He also thinks that "calcareous matters" in the soils may be converted into lime by the burning.—Now our subsoils effervesce with acide: and it would not seem unreasonable to suppose that the soil contains lime in some of its combinations which may be changed to a more fertilizing form by the heat; but be this as it may, in England some of the finest effects of paring and burning have been observed on *chalky* downs. Sir J. Sinclair says it is "peculiarly applicable to such lands." He adds, "Mr. Boys of Kent, has given a detailed account of experiments tried on 267 acres, principally consisting of such downs, and when the season proved favorable, with uniform success.—A single crop thus raised, was often equal to the value of the land in its original state."

G. Stafford (already referred to) considers it much *cheaper and better* to burn the earth where a garden has been laid out on a heavy soil, than to cart in sand, ashes and other materials. He throws out a trench eight feet wide and three feet deep, fills it with wood, and covers it like a coal-kiln, throwing on earth as the heat increases. He says after twenty-two years' experience, "I have been of opinion that I could add to the mass until it reached the height of ten feet."

Several instances are mentioned of the complete success of this method: "A work was completed in a few days that never could have been done, otherwise, in his whole life time—that is, he rendered the ground prolific; and I have never witnessed better success in crops, than I have done of every crop that has been planted in this composition."

Again, he says: "When I first came to this place, the garden was for the most part, a strong clay. No weather appeared to have a good effect upon it. At one time it was covered by water; and at another time impenetrable by being too dry. I then commenced burning, and in a few days produced a composition three feet deep, equal if not superior, to any soil in this country. The clay is rendered as pliable as burnt chalk. Every thing appears to thrive in it. I calculate that the ground so heated, will require no manure for at least four or five years, as every vegetable grew too strong for the first two years."

He thinks the clay there of a superior kind on account of the "calcareous matter" it contains; but we presume not superior to the clays of Western New York. †

Silk business in Rochester and its vicinity.

We called yesterday at the house of Mr. Joseph Alleyn, of this city, and were shown about 2 lbs. of sewing silk manufactured by Mr. John Adams and his family, of Adams Basin, in this county, and colored by Mr. Alleyn at his carpet factory. It is of various and beautiful colors, very smooth and glossy and stronger than any imported silk we have ever seen.

Mr. Alleyn has just procured one of Dennis's Silk Spinning and Twisting Machines, which is now in operation in his family, and afforded us much pleasure. Mr. A. has already engaged about 50 bushels of cocoons to manufacture on shares. He informs us that he also intends to connect the business of *silk weaving* with his carpet factory, and has made arrangements for obtaining machinery and a workman from England.

Those who still have doubts respecting the practicability or success of the silk business in this country, will soon have demonstration which must convince the most skeptical. Many families in this and adjacent counties are now engaged in the business, and the results of their labors, when known, will be a matter of astonishment to many.

Mr. Adams has, at our suggestion, given us a brief statement respecting his experience in feeding silk worms, &c., which we are happy to subjoin.

Messrs. Editors.—The past season (1839) we fed, as we supposed, 100,000 worms. The leaves of the white mulberry alone are used by us. During the last age of the worms, as may well be imagined, we had a hard task to supply so many voracious animals with food. In addition to the labor of my own family, I paid six or eight dollars for hired help. We fed the worms 5 or 6 times a day, which I have since learned was not necessary; and this year we have adopted a different plan, and only feed them 3 times a day. We commenced operations this year early in June, with about 80,000 worms. We have fed all these without any other help than our own family, (consisting of myself and wife and four children, the oldest a lad of 14, the other three, girls,) excepting the assistance of two small boys during two days, when I was preparing bushes for the worms to wind on. On gathering our crop we had 22 bushels of cocoons, which were of a better quality than last year.

We use "Dennis' contra twist Reel;" my wife has reeled 5½ lbs. of silk during the past eight days, besides attending to the usual duties of the family.—With undivided attention she can reel about a pound a day. We think we can calculate on a pound of raw silk from a bushel of cocoons.

Very respectfully yours, &c.,

JOHN ADAMS.

Adams Basin, July 20th.

P. S. Any information which I can give on this subject, shall be freely communicated if desired.

Harvesting Peas.

The time for harvesting peas being now arrived, we would remind farmers that by far the cheapest and most expeditious way is to pull and collect them at one operation, by means of a horse-rake.

For the New Genesee Farmer.

New Kinds of Wheat.

Messrs. Thomas & Bateham.—In the last number of the Farmer is a communication from W. T. Cuyler, giving an account of the Tuscany Wheat.—He says it stands the winter well, and is considerably earlier than common wheat. In our town, where it was first introduced by Mr. Hanford, the Tuscany wheat has not stood the winters very well, nor has it ripened much if any earlier than the common Flint Wheat. Owing to a part of it being destroyed by the winter, it has usually stood thin on the ground, and to this may in part be attributed its large growth and fine berry. On the 16th of September last, I sowed one peck of the Tuscany Wheat on twenty-one rods of ground. It came up well, but at harvest I found it only stood about half as thick as on a piece of land, of the same size adjoining, where I sowed less than seven quarts of the White Florence Wheat, direct from France. On the same day, and on the same soil, I sowed a piece of the Virginia May Wheat, which ripened about ten days earlier than either of the others. The berry of the Florence is as large and fine as the Tuscany; but as I was fearful that it would not stand the winter, I sowed it too thickly, and in consequence the straw was rather small and short. Those who have examined it are of opinion that it will prove a valuable acquisition to the wheat growers of Western New York; and so will the Tuscany, if it will endure our winters without injury.

Respectfully Yours,

R. HARMON, Jr.

Wheatland, July, 1840.

Remarks.—The difference of results in the experiments with the Tuscany Wheat, may be owing to several circumstances. It will be remembered that Mr. Cuyler discovered several varieties among his Tuscany Wheat when he received it from Wheatland; some of which stood the winter better than others, and he took pains to separate it. So that the kind he now cultivates may be different from that cultivated by Mr. Harmon, which may be mixed as at first. Or it may be that Mr. Cuyler's land is drier and warmer than Mr. Harmon's, which would cause a difference in the time of ripening, and in the liability to injury by the winter.—*Eds.*

Larger Calves.

Messrs. Editors—You can tell Mr. Benj. Chase that I have a Durham Bull Calf, that on the day he was one year old, weighed 920 lbs., and that he was never fed grain; he was fed milk until 4 months 13 days old, after that pasture while it was, and then clover hay, with about 6 quarts of bran per day—in the spring the clover hay was done, and I fed him potatoes in place of bran. But Mr. Wynant Younghms, of Rensselaer Co. beats us both: his (by the Albany Evening Journal) weighed the day he was one year old 1026 lbs.; mine weighed 21 lbs. more than his when 5 months old. Mr. Chase must try again before he has the largest calf.

Yours, &c.

JOHN JOHNSTON

Seneca Co., near Geneva, 4th July, 1840.

The Cherry Slug.

In our late excursion we noticed the ravages of this insect in Ontario county; and as the chief part of the trees were small, we could not but regret that there was no kind being to throw a handful of ashes over them.

We are inclined to think that the numbers of this insect would not be formidable, if a little care was timely extended; and that they increase rather slowly, Last season only a few appeared in our nursery, and these were promptly destroyed. This season we have not seen more than one or two. †

From the Farmers' Register.

On the different proposed Schemes of Rotation.

One of those lucky chances which sometimes occur to the way faring man, has brought me to-day, *nolens volens*, to this place: a place which has been rendered not quite so noted in your journal by the essays of its worthy proprietor, as was Carysbrook of England by the temporary occupancy of Charles, who, if I remember aright, took refuge there from the commonwealth's men. How are the apparent errors of short-sighted mortals turned to good account by a kind Providence! I deplored missing my way as a great evil; but what a treat was in store for me in the sight of this interesting spot! Still more I lamented my fate when I found the landlord was from home! But you and your readers are the gainers by my ill luck, inasmuch that it has produced this *valuable* communication. Nor is it a total loss with me; for the absence has been the means of bringing out in finer relief, the shining merit of his representative, a person bearing the name of the immortal author of the Declaration of Independence, who in his sphere, (the department of butler,) is no less perfect than was his great namesake in the cabinet; and to whom, if Pope said true, equal honor is due:

"Act well your part, there *all* the honor lies."

Casting my eye around the hall in which I now sit, where are to be seen the appliances of hunting and fishing, it fell upon some of the numbers of your Register, which among other appropriate periodicals, are scattered in careless literary confusion about the room. In the March number I found an essay on "five-field rotation and grazing;" this referred to other communications on the same subject in the February number.

Now, Mr. Editor, my success in the discussion of Jefferson's entables, has not inspired me with the vanity to pretend to discuss farming matters with these gentlemen. It is true I am a sort of a farmer in a humble way. Having failed at one of the *learned* professions, I betook myself to my present occupation, as a make-shift, hoping that if I failed here too, my errors would be more apt to escape observation.

The first thing that struck my attention in the abovementioned essays, was the remarkably civil, complimentary style of your tip-top farmers to each other.—I like it much. It is so different from that gasconading, insulting mode of writing practised by politicians; and not in writing only, but in debating too.—I trust the new code of honor which authorizes one man to give another the lie, or charge him with dishonesty, and then to avoid responsibility by averring that he means a political lie, or political dishonesty, will never find acceptance among the agricultural community. Among us, let there be no distinction, between an agricultural lie and any other.

But to the point. With all due deference, permit me to state an objection to each of the systems of rotation proposed. To Mr. Carter's, because it appears to be bottomed upon the presumption that the land has become too rich already, and requires depletion, an effect which, it strikes me, the three successive grain crops are well calculated to promote. To Mr. Baxton's, because it leaves the land naked and perfectly idle through one winter, and of course losing ground. I have always thought a spring crop after corn inadmissable for that reason. Besides that, grass sown on oats in the spring of the year is extremely liable to perish under the influence of the summer's sun. To Rivanna's, because without the common, or sixth field, it differs but little from the exploded three-field, or make-shift system. It is true he considers this common *important* to all rotations; but to his it seems indispensable, for where else are your cattle to find sustenance till the 20th June, the day set for the feast? Before that day comes they will have feasted the buzzards. And even with the aid of the common or "short bite," (by the way, if it is a "short bite" in the Green Spring country, what can be expected from "old Flu," or some other places I could name!) they would exhibit in their "unfed sides" demonstration strong against the system: they would sing, in very doleful tones indeed, the old song,

"'Twas on the 21st of June,
In charming summer weather."

Give the three-field shift the advantage of a common, and where is the difference? No other than one field of clover instead of two, covering a somewhat smaller portion of your farm, one-third being less than two-fifths. I am of Mr. C's opinion, that under Rivanna's system the clover has not imparted to the land all its benefit before it is re-fallowed. It ought to be an object, in a judicious and economical course of husbandry to obtain hay and seed from a clover crop, or at least a part of it. If then one of the two fields is mowed and seed is gathered from it, it cannot be grazed at all the same year. Only one field therefore is left for grazing, and that between the 20th June and fallowing time—a very "short bite" indeed. It appears to me there should be two clover years in succession—cutting the first, if the crop will bear the scythe, and grazing the second—and two grain years only in succession, which is a four-field course; and if I am allowed the common in the bargain, this is a valuable auxiliary, to enable the pasture field to get a little ahead in the spring, before the stock is put on.

The long and short of the matter is, that systems for all things must be controlled by circumstances.—A system of mental improvements must be adapted to the capacity of the particular mind, so must be a system of agriculture to the qualities of the soil, general condition, and localities of the particular farm. Rivanna, for example, or the author, enjoys the advantage of a very fine meadow, and abundant crops of corn, with a plenty of wheat straw, &c., which afford no small help to the "short bite." By the way, in passing through the front gate, I observed some horses standing with their chins resting on the fence, and looking with longing eyes into the adjoining clover field, and seeming to pray for the advent of the 20th June; and some hogs peering, with optics sharp, through the rails.

In conclusion of these very *erudite* remarks, permit me to say that the present condition of this splendid farm furnishes a refutation of all objections to the management of it. The science of agriculture is here beautifully illustrated, whilst its profits are largely realized.

A TRAVELER.

Carysbrook, May 12, 1840.

From the Farmers' Cabinet.

Dialogue Continued--Cultivation.

Sykes.—Poor Grabb! he's a kind-hearted man, truly; but if his father had not lived before him, and left him at his death, the fine farm which he so miserably manages, he would, by this time, have been in the alms-house. It is a pity, however, that he did not do a little in the way of cultivating his son's *mind* at the same time—his *sub-soil* must be in a wretched state, I guess. Well then, neighbor, my team shall be here by peep of day to-morrow, to join yours, and as I wish to drag, and roll, and harrow, three times in a place, the field designed for turnips, we must make up our mind to stretch a point, and complete it before we leave; and they can then collect the weeds and burn them the next day. My heart aches when I look at the poor widow of an excellent friend, and her bereaved little ones; and I have made up my mind and my vow, if God spares me, to assist her in her trouble, until her fine lad is capable of taking a father's place, and work for his poor mother and sisters.

Father.—My noble friend, I must partake with you in that luxury, and I shall not only be ready and willing, but be *glad* to meet you at any time with heart and hand!—God bless you—good bye.

Frank.—What a contrast! I think, however, that there must be a difference in the nature of the *tree* as well as the soil—the fruit is so very unlike.

Father.—No doubt there is, but cultivation will always work wonders.

Frank.—How droll to hear Grabb talk of a song! It must be a gloomy one to fit his state of mind; I should like to hear it.

Father.—And so it is—words and tune: it is one of Dibdin's happiest efforts: and you must fancy it, sung in the most doleful strains, to a tune in the minor key.

We bipeds, made up of frail clay,
Alas! are the children of sorrow,
And though brisk and merry to-day,
We all may be wretched to-morrow.
For sunshine's succeed by rain,
Then, fearful of life's stormy weather;
Since pleasure can only bring pain,
Let us all be unhappy together.

Frank.—Capital! but how would you reclaim a soil so sour, cold, and sterile, and which produces such crabbed fruit, as that of which Grabb is the similitude!

Father.—Oh nothing is easier or more agreeable: I would remove the soil from about the roots to a good depth and distance, and fill the opening with fresh mould, mixed with a copious supply of lime; prune very close, and leave the event, trusting to the sweetening influence, so beautifully expressed by the Methodist preacher, "lime to a sour, stubborn soil, is like the grace of God to a wicked man's heart."

Frank.—I should like to try the effect of such liming in Grabb's case, for, poor fellow, he is so miserable, that I expect he is as great an object of charity and commiseration as Mrs. Williams and her poor family—is there nothing that can be done for him?

Father.—I fear not.

Frank.—And yet, you said, cultivation will always work wonders.

Father.—That's good—and so it will: and suppose that I get Sykes to assist us to take him up and carry him, as though he were a *bereaved widow?*

Frank.—Oh, pray do, I will be answerable for him; at present he appears quite friendless and miserable, within doors as well as without—as he says.

No. 9. The rich and healthy surface and poisonous sub-soil. This is an interesting case—shall we take the beautiful Newington Peach tree, which flourished so finely for two years in our garden, and died so prematurely last year? I think we shall find the analogy complete. That fine tree was trained with the greatest care in the nursery, until it was fit for transplanting into the garden, when the soil, a firm, rich, hazel loam, was trenched, and cleaned, and limed for its reception. The first season after its removal, it bore much fine fruit, of the most delicious flavor, and large, handsome appearance, bringing them all to maturity, and perfectly ripening its wood. The next season it bore most abundantly, and made noble shoots, which required no pruning or heading back; its blossoms were remarkably large, and of healthy appearance; both fruit and wood were well ripened, and fully testified the care and attention which had been exercised in its culture from the first.

On the appearance of the blossoms next spring, they were observed to be much smaller, and paler in color; and although the fruit set well, many fell off when they were the size of peas; and at midsummer, many of the under leaves withered and fell from the branches. Before Michælmas, the color of the foliage had completely changed; the fruit ceased to grow, and the tree was declared to be infected with the disorder called the *yellows*. The worms had made sad havoc beneath the bark near the ground; nor was it a matter of surprise when, on the opening of the last spring, not a bud or blossom made their appearance—the tree was quite dead. On removing it, I was determined, if possible, to learn the cause of such premature decay and sudden death, and therefore very carefully removed the earth from about the roots, laying them quite bare without wounding them. All appeared healthy, and the soil in the finest condition imaginable, until I discovered that a small and tender root had extended itself until it had reached a small oozing of water, the color of the rust of iron, which proved to be the head of a mineral spring of the strongest quality. This small root was decayed for a considerable way towards the body of the tree, and at least three feet from the source of the evil; and this was no doubt the cause of the disease and death of the finest tree I ever saw.

Frank.—How very strange, that so trifling a circumstance as the point of a small root reaching a little water at such a distance from the tree, should be the cause of such sudden destruction.

Father.—It is: but to show you how certainly this *was* the cause, I will copy from our favorite Tull an account of some useful experiments which he made expressly with the view of showing the truth of the position, that vegetables will take up and circulate indiscriminately, the most deleterious, as well as the most wholesome substances; and that they often do to their destruction.

Exp. 1. "I put a mint stock into a glass of water, but I immersed *one string* of its roots, being brought over the top of that glass into another glass of salt water, contiguous to the top of the other glass—this mint very soon died.

Exp. 2. I put the upper root of another root into a small glass of ink—this root was also killed by some of the ink ingredients.

Exp. 3. I made a very strong liquor with water and the bruised seed of the garlick, and placed the top of it close to the top of another glass, having in it a mint plant, two or three of whose upper roots put into this stinking liquor, and there remaining—it killed the mint in some time; and when the edge of the leaves of the mint began to change color, I chewed many of them in my mouth, and found at first the strong flavor of the mint, but that was soon over, and then the nauseous taste of the garlick was soon perceptible." So, you see, how readily plants, whose roots reach to a poisonous sub-soil, imbibe and circulate the deleterious matter to their destruction. I once grew some turnips on land having a wet sub-soil, and on storing them for winter use, I observed that the point of the tap-root of every one was decayed; but as that was not near the bulb, I did not consider the circumstance of any consequence. On opening the pit in the winter, however, I found that three parts of them were rotten,

and the stench arising from them had infected the remainder, so that the cattle refused to eat them.

Frank.—How satifactorily you have accounted for the decay and death of our favorite tree! what a pity that you could not have ascertained the cause during its life time, as it might so easily have been prevented, by dividing that small root from the body of the tree!

Father.—Truly; but the lesson has not been lost upon us, for you know that I have recovered many trees that have been infected with the yellows and worms, by trenching and dressing the water with lime, and removing the bad soil from amongst the roots. And now, do you know any young and promising individual, whose untimely death might be likened to the decay and death of our favorite tree?

Frank.—Yes, Henry Templeton.

Father.—Exactly—of an excellent and highly-respected family, he was the brightest hope—an only son—with a mind and body cast in beauty's mould, he was truly "the observed of all observers:" even in the nusery his education had commenced; and the wisdom displayed by his amiable parents in this particular, was crowned with perfect success. His youth was spent in acquiring knowledge of the most useful and valuable kinds; and the commencement of his public life, which might be compared to the planting out of our tree from the nursery, was hailed by his friends with the brightest expectations. We well know the esteem and respect which he won from all who knew him, while his gentle and amiable, and refined manners were the admiration of every one. I remember the time when he commenced the study of the law under counsellor S., and how fortunate his family considered him in the choice of his fellow-student, Charles E., as his particular friend—alas! that very circumstance proved the total ruin of him, and the hopes of his family; for Charles E. was a young man addicted to every species of vice and wickedness, and possessed of the most consummate hypocrisy!—one fatal evening he prevailed upon Henry to accompany him to the gaming-table, and his destruction was sealed.

In a short year from this time he returned to his father's house, an emaciated being—his health destroyed, his mind frenzied, and in the last stage of consumption, only to sigh out his soul in penitence in the arms of his broken-hearted parents and sisters! Poor Henry Templeton! one small root penetrating to the poison in the subsoil, was the cause of indescribable suffering, misery, remorse, anguish, and death to himself, and distress unspeakable to his tenderly attached family, and a numerous circle of young and much-loved friends.

Frank.—Poor Henry Templeton! who would have thought that we could find so true a portrait of him in our beautiful and unfortunate peach tree!

Father.—But here is one more soil for examination. No. 10. It is, to appearance, a happy mixture, and in the highest state of cultivation; but the tree which is planted in it makes no progress. It is not diseased, but can scarcely be called healthy; it blossoms in season, but does not seem to put forth energy sufficient to bring its fruit to perfection; and although when produced it is fair to the eye, it has little flavor, and soon perishes. Its shoots are not deformed, nor do they require much pruning; but the foliage has a weak and tender appearance, although it cannot be denominated sickly. Its bark is thin and clean; and its foliage does not fall or change color prematurely, but it makes no progress—there is no strength in its growth, and yet there is no sensible defect—an ornamental tree, but of very little value, although of the choicest fruit-bearing species.

Frank.—Why, what can be the matter with the tree then?

Father.—Nothing—the *matter* is in the soil, which has been too highly manured, and made light and porous by such frequent dressings—in fact this tree might be compared to a rich, indolent, unemployed young man, eaten up with *ennui!* no disease, but no health—no pain, but no pleasure—with energy sufficient to put forth a blossom, but not enough to bring it to perfection—no fear of dying, but no hope of living—blameless, but praiseless—does no harm, nor any good, and may as well be dead as alive!

Frank.—Well, I would not be a gentleman if I could. But how would you set about curing such a nameless disease?

Father.—*I would try it with affliction.* I would open the ground about the roots, amputate some of them, and mix clay and lime with fresh strong loam for filling in; and then I would prune close and hard, shrouding the branches pretty close to the body of the tree, and await the result with confidence.

Frank.—Well, these would be *pretty hard lines*, as Grabb says.

Father.—Yes, but I have known many such characters who had abundant cause to exclaim, "It is good for me that I have been afflicted." You know there is the son of old Judge Thomson, who, while his wealth remained with him, has often complained of the trouble of eating, and could not bear the idea of walking abroad, even on the score of health: was charitably disposed, but could not prevail upon himself to use the least exertion, even were it to save a fellow creature from starving: it is even said, that, when in a passion with his servants, he has declared that he would kick them if it were not so much trouble!—But the fire which destroyed his wealth, purified and sanctified his soul;—he is now happy because he is industrious; cheerful because usefully employed; and finds it no painful exertion to walk miles to render assistance to a suffering neighbor. He is now rich in good works and sound bodily health; and often exclaims "It is good for me that I have been afflicted!"

Let us close by reading Dr. Drennan's beautiful hymn,

THE FRUITS OF BENEVOLENCE.

The husbandman goes forth a-field,
What hopes his heart expand!
What calm delight his labors yield,
A harvest from his hand!

The nobler husbandry of mind,
And culture of the heart—
Shall such with men less favor find?
Less genuine joy impart?

Ah! no—your goodness strikes a root,
Which dies not, nor decays;
And future life shall yield the fruit,
That blossoms now, in praise.

The youthful hopes, which now expand
Their green and tender leaves,
Shall spread a plenty o'er the land,
In rich and yellow sheaves.

Thus, a small bounty well bestow'd
May perfect heaven's high plan;
First daughter to the love of God,
Is charity to man.

'Tis he, who scatters blessings round,
Adores his Maker best!
His walk through life is mercy-crowned,
His bed of death is peace. J. P.

Blinders upon Horses.

Is there any real use in having blinds or blinders upon the bridles of carriage horses? We doubt exceedingly if there need be, provided, nevertheless, as the lawyers say, the horses are trained as they ought to be in the beginning. We have known horses that would travel as well without as with them, and we believe much better. We have no doubt that nine-tenths of the springing and starting of horses upon the road is owing to their being hood winked with those pads over their eyes, leaving only a small space to peep out, and that too not in the direction of true vision. Objects cannot appear distinct and natural when thus seen, and what wonder is it if they start when they discover what to them appears, in consequence of the indistinctness with which it is seen, some strange monster. Horses will run day after day in the pasture among rocks and stumps, without betraying the least fear, but when in harness will "shy" whenever they pass by one of those same rocks and stumps Sometimes we meet with a horse that is partially blind or near sighted, and these almost invariably start and are skittish. Instead of "blinders," such horses should have nothing over their eyes, or spectacles to improve their *optics*. There are many other improvements to be made upon harness.

We load horses too much with trappings. One quarter of the expense is incurred for useless straps and buckles and buttons. The more light and simple harness can be made compatible with strength and real use the better it is, and the more ornamental it will be. We need all the strength of the horse to draw the load, instead of bearing up a useless burden of leather and metal.—*Maine Farmer.*

Preserving Green Peas.

Now is the time for those who like a good thing in the winter, to lay up a store of green peas. If shelled and put into a dry bottle and corked perfectly tight, (sealed,) they may be kept until winter with ease.—They should be cooked as soon as the bottle is opened, as they will not keep well after the air comes to them.

We have been told by a person who has traveled in Germany, that the Germans preserve green peas by shelling them and putting them into a pickle made of salt and water. In the winter they are taken out, soaked until fresh, and cooked. Beans in the pod are are also preserved, pods and all, by cutting them into pieces and pickling them in the same way.—*Ib.*

Rain.

The largest drops of rain, which are about one fifth of an inch in diameter, will fall 2,040 feet in a minute; but the ordinary drops in this climate will seldom fall half so fast. Hail-stones in the south of Europe, having sometimes the enormous diameter of two inches, will fall with a velocity of 118½ feet in a second, or more than a mile and a quarter in a minute; a rapidity of stroke which destroys corn-fields and ravages vineyards.

The Mahogany Tree in St. Domingo, is tall, straight and beautiful, with red flowers, and oval lemon sized fruit. When the tree grows on a barren soil, the grain of this wood is beautifully variegated—upon rich ground it is pale, open, and of little value.

It is stated by the Mayor of Boston, that one-fifth o the taxation of the city goes to the public schools.

Rural Melodies.

BY BEN BARLEYCORN.

Say, do you love the music of the farm,
Sweet melodies of nature, that can charm
The very soul—ay, hold control
O'er all the feeling, and to man impart
The best affections of a grateful heart?

Then come with me; list to the cheerful songs,
The coral anthems of the feather'd throngs.
We hear the lay—from every spray,
Along the hill-tops—o'er the flowery lawn,
And merry music hails the breaking dawn!

Up mounts the curlew, trilling through the air;
And hark! we hear the cherry lark, too, there.
The soaring kite—in giddy height,
Sends forth his piercing note, loud, shrill, and clear,
And cackling fowls to covert scud with fear.

The solitary cat-bird and the thrush,
On towering pine or shady alder bush,
Now strain their throats—in comic notes;
While on the osier bough or 'midst the fern,
The black-bird and the sparrow sing in turn.

Sweet robin; now from yon old apple tree,
Thou warblest forth thy song most merrily!
From morn to night—'tis thy delight,
Thy fond, endear'd and sitting mate to please
And entertain with thy own melodies.

Like jingling school-bell, screams the noisy jay,
As off she flies far to the copse away.
The whistling quails—athwart the vale,
Call out *Bob White!* then skulks along the glen,
Avoiding all society with men.

The blue-bird, goldfinch, martin, swallow, wren,
The carolers of forest, field and fen,
Sweet turtle dove—who sings of love,
The twilight minstrel too, lone whip-poor-will,
These with their canzonets the hamlet fill.

But there is one whose note out-does the whole,
'Tis so diverting and so very droll;
Pert bob-a-link—I hear thy clink,
Alla-capella-cantabile-chickopee-nibble-O-nibble-O-tintinnabulo-cheerily-cheerily-sweet!
What bird in jabber can with thee compete?

Here herds are lowing, there the sporting lambs
Are frisking gay, or bleating for their dams.
The rampant hounds—pursue their rounds;
Their yelping music makes the welkin ring,
And frightened conies to their couches spring.

The torrent rumbles down its rugged way,
And streamlets murmur thro' the blooming lay.
The wavy trees—creak to the breeze
That hums concordant on, o'er plain and hill,
And in its course revolves the rattling mill.

Come now, ye Metropolitans with me
Enjoy the sweets of rural minstrelsy;
In vain ye show—what art may do,
Your *Weeds*, and *Knights*, and *Russels*, all must yield
The palm to these sweet songsters of the field.

Yankee Farmer.

For the New Genesee Farmer.

Reply to Annette, on Female Education.

Mr. Editor—I noticed in your last, some remarks from Annette, on the "Mis-education of Farmers' Daughters," and having been myself a farmer's daughter, and a member of one of the oldest Institutions in the State three years, I feel unwilling to have all the ignorance of a vain and indolent school-girl attributed either to the "system of education," or the "mode of teaching;" and I believe, could the record be given for the last ten years of the female seminaries in Canandaigua, Geneva, Albany, and Troy, (which are among the oldest institutions in the State, and commonly have the appellation of "Fashionable Boarding School" attached to them,") it would invariably be, that, "like mother, like child." Young ladies do not go to these institutions to receive their first impressions; they seldom enter until their habits and dispositions are formed; and instead of affirming that the "whole system of popular female education is conducted with reference to *display* rather than *utility*, and is exactly calculated to create a taste for the emptly show and false pleasures of a city," she would be surprised to see those teachers weary themselves, early and late, to counteract the influence of the last injunction of an injudicious, uneducated, but wealthy mother. "Madam, pay particular attention to her manners" is never forgotten, while it is seldom suggested that her mind may be neglected; and one would suppose that the adage "Knowledge is power," had been changed in her cradle, for "wealth is power;" and her Cameo's, Mosaic's, Watch, Gold Pencil, and Finger Rings, are to her sufficient recommendations, and she considers herself the "true nobility" of the school; and if informed it is against the rules to wear ornaments every day, the reply is at once offered, "Ma' wished me to wear them every day." If reproved for her idleness, "Ma' never wished me to study History, she always said I could read that at home with her—and mathematics will never do me any good,—I am not going to teach." There is no school but what has more or less of this class of young ladies in it; but they seldom remain more than six months, or a year, in which time they have received their "liberal and fashionable education," while, in truth, they have not learned the alphabet of their own ignorance. Who would apply the term "liberally educated" to a gentleman who had been six months or a year in college? and no one would have the vanity to think that a lady could accomplish more than a gentleman.

To say of these institutions "they *pretend* to teach many of the natural sciences, but they are taught in such a *superficial, uninteresting* manner, that they fail of producing their proper influence on the mind, and that a mere *smattering* of these sciences is deemed sufficient," is as untrue as it is unkind, and however superficial I may be in Mathematics, Metaphysics, or the Natural Sciences, it is no fault of any teacher, or "system of teaching;" and no young lady, with sufficient time, a tolerable ambition, and a proper stimulus from home, can come from any one of the above institutions with these false notions of education. It is no matter whether they are Merchants', Lawyers', or Farmers' daughters; if they go to improve, they will improve; and just what they aim to be, they will be. If they go "to get the polish," they return home with a borrowed garment of politeness; but return as they went, "unfitted for any station in life," and of course, "discontented and unhappy," while the happiness of the *truly* educated lady consists in making herself *useful*, and that too in her own home, whether in the city or in the country. It is also incongruous to suppose that the "liberally educated lady should get tired of the country," and the sweets of rural life, or reject the addresses of real merit, "for some heartless city fop;" it shows the want of education, not the effect of it; and if Annette wishes a reformation in the present system of education, she could not do it more effectually than *to reform the mothers at home.*

FANNY.

Walnut Grove, July 18, 1840.

Remarks.—We give Fanny a cordial welcome to a place in our columns. She wields an able pen, and we hope to hear from her again. While Annette perceived the existence of a great and spreading evil in society, and partly discovered its source; Fanny has traced it to the fountain, and we hope she will not leave it, till more has been done to check its bitter waters.—*Eds.*

The Horse Thistle.

The common horse thistle, like other large weeds, chokes and excludes better things, or robs them of their nourishment; and in meadows and wheat fields, sometimes increases the damage by detaining the haymaker and the binder, who have to stop and throw it out. A very little care however, is sufficient to keep it within moderate limits. About the time it is coming into flower, *a side stroke* from the common hoe, will break the stalk from the root, and it never sprouts afterwards. Pastures may thus be kept in order by an annual visit; and if none go to seed on the ground, the stock will soon run out. Perhaps indeed, a few visitors may come floating on the wind from the fields of a careless neighbor; but these, in most cases, will be so few in number, that a breakfast spell would give a good account of them in any pasture of moderate size.

We are the more earnest on this subject, because these intruders, making no noise, come in almost without observation; but let such as gabble or squeal venture there without any right, though probably doing less injury, and they are ejected without delay. This is right; but farmers should be consistent, and drive out the destroyers of their crops, whether they stand on four legs, on two legs, or on no legs at all. †

For the New Genesee Farmer.

Breaking Steers.

Messrs. Editors.—I agree with the remarks of your correspondent C****, in your last paper, that Steers should be treated with "gentleness and kindness;" but, with all due deference to his opinion, I must say I do not think that swinging a yoke around the neck of a steer, and letting him run frightened and bellowing about the yard till he is "somewhat subdued," is very "discreet management" or kind and gentle treatment.

I will therefore briefly state what I consider "the more excellent way." Let the steers be confined singly in a strong and convenient yard—then with a suitable whip (say 6 feet in length, with a short lash attached) teach the steer to be drove. None but gentle means are requisite. A skilful and patient use of the whip and voice will overcome all obstacles, and in ordinary cases, a few hours is sufficient to teach him to be driven at pleasure about the yard. His mate may then be taught in the same manner. This will probably be sufficient for once, and the business may be resumed at intervals until they can be driven singly or side by side, and turned either way with perfect ease. This treatment will render the steers more kind and gentle, until they will seem as well pleased with the exercise as their owner is with their improvement. Then, and not till then, the yoke may be put on, and after a little more practice light loads should be attached, to teach them to draw, and the work is done. This is my method of breaking steers by kindness. They are not often *sulky* if treated in this manner—much more frequently *refractory*. In such cases nothing is wanting but a little more time and more patience on the part of the driver. If the cattle are kept gentle, as they always should be by kind treatment, two pairs are usually broke in three days, and in this manner will *stay broke.*

R.

Madison Co., July 15th, 1840.

Errata.—P. 97, 2d col., line 26 from bottom, for "rusty from disease," read "*musty from disuse.*".

P. 104, 1st col., line 6 from top, for "absurd to suppose," read, *absurd as to suppose.*

The third paragraph on "lightning rods," p. 104 should not be quoted.

Seed Buckwheat for sale at the Seed Store by
M. B. BATEHAM.

NEW BOOKS.

CHILD'S work on Beet Sugar; Buel's Farmers' Companion; the American Swine Breeder's Companion; Bridgeman's Gardener, new edition; and a fresh supply of sundry other valuable books, for sale at the Seed Store.
M. B. BATEHAM.
June 1st, 1840.

OLD GENESEE FARMER,

BOUND Vols., 1st. and 4th, may be had at $1 per vol.. Swine Breeder, or a treatise on fattening swine..
For sale by D. HOYT.
May 28. 6, State-st. Rochester.

VOLUMES WANTED.

A high price will be paid for several copies of vols. 3, 5, 8 and 9 of the Weekly Genesee Farmer.
July 1st, 1840. M. B. BATEHAM.

PORTABLE THRASHING MACHINES,

CLOVER MACHINES AND HORSE POWERS.

WARRANTED to be thoroughly built and to work well: made by Thomas D. Burrall, Geneva, Ontario Co., N. Y.

These machines have all been warranted "to be thoroughly built, and to work well;" and they *have fully sustained that warranty.*

They have gone largely into use; more than four thousand are in operation; many of them have thrashed from ten to twenty thousand bushels each, *without repairs.* More than eight hundred new machines were sold during the last season; and on thorough trial, they have been recommended by those who use them "to be as complete, and to *work as well as any in the world.*"

His new Combination Machine separates the grain from the straw in the process of thrashing, *without any additional machinery*; saves the labor of one hand in raking away the straw—much grain which is usually raked off with the straw—and is driven with less power than any other machine in use.

Geneva, June 27, 1840.

ROCHESTER PRICES CURRENT.

CORRECTED FOR

THE NEW GENESEE FARMER, AUGUST 2, 1840.

WHEAT,	per bushel,	$	78 a $	81
CORN,	"		37½	41
OATS,	"		28	
BARLEY,	"		37½	41
RYE,	"		50	
PEAS, Common,	"		50	
BEANS, White,	"		75	
POTATOES,	" (new)		34	37½
APPLES, Desert,	"		62½	75
" Dried,	"		1,00	1,25
CIDER,	barrel,		1,75	2,00
FLOUR, Superfine,	"		4,00	4,25
" Fine,	"		3,50	3,75
SALT,	"		1,75	1,81
PORK, Mess,	"		13,00	14,00
" Prime,	"		10,50	11,00
" Hog,	100 lbs.		4,00	4,50
BEEF,	"		4,00	
EGGS,	per dozen,		10	12½
BUTTER, Fresh,	per pound		10	12½
" Firkin,	"		10.	
CHEESE,	"		6	8
LARD,	"		7	8
TALLOW,	"		10	
HIDES,	"		5	
SHEEP SKINS,	each,		38	50
WOOL,	pound,		38	50
PEARL ASHES,	100 lbs.		5,00	
POT,	"		4,50	
HAY,	ton,		5,00	6,00
GRASS SEED,	bushel,		1,50	2,00
CLOVER,	"		10,00	12,00
FLAX,	"		75	1,00
PLASTER, (in bbls.)	per ton,		6,00	
" bulk, (at Wheatland)			3,00	

London, July 3.—*Harvest Prospects.*—The wheat is now in full bloom, and nothing could have been better for it than the weather for the last week or ten days.

Flour in London 27s. in bond, and in Liverpool 24s. & 26s. General average price of wheat for the week ending June 20, 67s. 4d. Aggregate average of last six weeks, 67s. 9d.—Duty 18s. 8d.

Liverpool, July 3.—Flour in bond has advanced to 26s. 9d. a 27s. 3d. per bbl.—at which about 5000 bbls. have sold to-day.